

## DOCUMENT RESUME

ED 363 516

SE 053 857

AUTHOR Huckenpohler, J. G.  
TITLE Academic Science and Engineering: Graduate Enrollment and Support, Fall 1991. Surveys of Science Resource Series. Detailed Statistical Tables.  
INSTITUTION National Science Foundation, Washington, D.C. Div. of Science Resources Studies.  
REPORT NO NSF-93-309  
PUB DATE 93  
NOTE 367p.  
AVAILABLE FROM Division of Science Resources Studies, National Science Foundation, Washington, DC 20550.  
PUB TYPE Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160) -- Statistical Data (110)  
  
EDRS PRICE MF01/PC15 Plus Postage.  
DESCRIPTORS \*College Science; Engineering Education; \*Graduate Students; Higher Education; Medical Education; Postdoctoral Education; \*Science Education

## ABSTRACT

The data presented in this report were collected in the 20th annual National Science Foundation/National Institutes of Health Survey of Graduate Students and Postdoctorates in Science and Engineering, covering 1991. The survey universe is composed of all U.S. institutions with departments or programs offering courses of study at the postbaccalaureate level in any science and engineering (S&E) field. Medical schools and other specialized institutions in health-related fields with postdoctoral programs or S&E master's or doctoral programs are also included. Section I, subsection A, presents national totals for all institutions, both doctorate- and master's-granting, for fall 1991. Subsection B contains trend data for all graduate institutions for the period 1983-91; subsection C contains trend statistics for doctorate-granting institutions only; subsection D presents similar trend data for master's-granting institutions. Subsection E contains institutional listings and subsection F contains rankings of individual institutions on the basis of the fall 1991 data. Section II presents a description of the survey methodology and response analysis. Section III lists the institutions surveyed by degree level. Section IV displays copies of the survey instruments, along with summary questionnaire facsimiles containing data for all departments or for selected groups of departments. (PR)

\*\*\*\*\*  
\* Reproductions supplied by EDRS are the best that can be made \*  
\* from the original document. \*  
\*\*\*\*\*

---

# Academic Science and Engineering: Graduate Enrollment and Support, Fall 1991

---



Surveys of Science Resources Series  
National Science Foundation      Detailed Statistical Tables

---

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

☒ This document has been reproduced as  
received from the person or organization  
originating it.

☐ Minor changes have been made to improve  
reproduction quality.

• Points of view or opinions stated in this docu-  
ment do not necessarily represent official  
OERI position or policy.

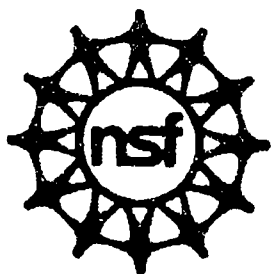
NSF 93-309

---

# **Academic Science and Engineering: Graduate Enrollment and Support, Fall 1991**

---

**Principal Author: J. G. Huckenpöhler**



**Surveys of Science Resources Series**  
**National Science Foundation      Detailed Statistical Tables**

**NSF 93-309**

### **Suggested Citation**

National Science Foundation, *Academic Science and Engineering: Graduate Enrollment and Support, Fall 1991*, NSF 93-309, (Washington DC, 1993).

### **Availability of Publications**

Single copies are available free of charge from the Division of Science Resources Studies, National Science Foundation, Washington DC 20550. If you are a user of electronic mail and have access to either BITNET or Internet, you may order publications electronically. BITNET users should address request to pubs@nsf. Internet users should send requests to pubs@nsf.gov. In your request, include the NSF publication number and title, number of copies, your name, and a complete mailing address. Printed publications may also be ordered by fax (703/644-4278). Publications should be received within three weeks after receipt of request. See roman numeral page four for availability of science and technology data on the Science and Technology Information System (STIS).

**NSF'S Telephonic Device for the Deaf: (202) 357-7492**



# Data Summary

---

- In fall 1991, 475,691 graduate students were enrolled in master's and doctoral programs in the science, engineering, and health fields. This total represents more than a 3-percent increase from the fall 1990 figure. The increase was more than 4 percent in the engineering fields and almost 3 percent in the science fields.
- Of all science fields, psychology students increased the most rapidly (6 percent). Growth was slowest in the mathematical sciences and computer sciences, each showing less than a 1-percent increase. The social sciences continued to be the most popular field, with 81,279 graduate students or more than one-sixth of the total. Nearly one-third of the engineering graduate students, 35,272, were enrolled in electrical engineering.
- Graduate students enrolled full time numbered 308,669 and accounted for 65 percent of the total. The number of graduate students enrolled full time increased at a faster rate from 1990 to 1991 than did those enrolled part time, 4 percent compared with 2 percent.
- The number of women enrolled in graduate S&E programs continued to rise more rapidly than the number of men, reaching almost 40 percent of the total. Women increased by more than 6 percent while men increased by less than 3 percent. Women continued to make up the majority of those enrolled in psychology and the health fields but accounted for only 14 percent of engineering graduate students.
- Foreign students, at almost 24 percent of the total, increased at nearly twice the rate of students with U.S. citizenship. Foreign students were most heavily concentrated in the physical sciences and in engineering, making up almost 37 percent and 36 percent of the total, respectively. Foreign students also made up about one-third of all graduate students in the mathematical sciences and computer sciences.
- At almost 41 percent of the full-time total, academic institutions remained the major source of support for full-time graduate students. Self-supported students (including those supported by loans, family money, or personal savings) made up almost 30 percent of the full-time total. The Federal Government supported a little less than 21 percent.
- Enrollment in doctorate-granting institutions, at 411,296, represented 86 percent of all graduate students. This percentage has varied only slightly since 1975. Nevertheless, master's-granting institutions accounted for more than one-eighth of all graduate students reported and grew by more than 6 percent from fall 1990 to fall 1991, compared with a 3-percent growth in enrollment at doctorate-granting institutions.



## What is STIS?

STIS is an electronic dissemination system that provides fast, easy access to National Science Foundation (NSF) publications. There is no cost to you except for possible long-distance phone charges. The service is available 24 hours a day, except for brief weekly maintenance periods.

## What Publications Are Available?

Publications currently available include:

- The *NSF Bulletin*
- Program announcements and "Dear Colleague" letters
- General publications and reports
- Press releases
- NSF vacancy announcements
- Award abstracts (1989–now)

The goal is for all printed publications to be available electronically.

## Access Methods

There are many ways to access STIS. Choose the method which meets your needs and the communication facilities you have available.

**Electronic Documents Via E-Mail.** If you have access to Internet or BITNET E-mail, you can send a specially formatted message, and the document you request will be automatically returned to you via E-mail.

**Anonymous FTP.** Internet users who are familiar with this file transfer method can quickly and easily transfer STIS documents to their local system for browsing and printing.

**On-Line STIS.** If you have a VT100 emulator and an Internet connection or a modem, you can log on to the on-line system. The on-line system features full-text search and retrieval software to help you locate the documents and award abstracts which are of interest to you. Once you locate a document, you can browse through it on-line, download it using the Kermit protocol, or request that it be mailed to you.

**Direct E-Mail.** You can request that STIS E-mail you a weekly summary of all the new documents on STIS. You can also sign up to get the full text of all documents added to STIS.

**WAIS.** If your campus has access to the Wide Area Information Servers, you can use your local WAIS client to search and download NSF publications.

## Getting Started With Documents Via E-Mail

Send a message to [stisserv@nsf.gov](mailto:stisserv@nsf.gov) (Internet) or [stisserv@NSF](mailto:stisserv@NSF) (BITNET). The text of the message should be as follows (the Subject line is ignored):

Request: stis  
Topic: index

You will receive a list of all the documents on STIS and instructions for retrieving them. Please note that all requests for electronic documents should be sent to [stisserv](mailto:stisserv), as shown above. Requests for *printed* publications should be sent to [pubs@nsf.gov](mailto:pubs@nsf.gov) (Internet) or [pubs@NSF](mailto:pubs@NSF) (BITNET).

## Getting Started With Anonymous FTP

FTP to [stis.nsf.gov](ftp://stis.nsf.gov). If you cannot connect, try 128.150.195.40. Enter *anonymous* for the username, and your E-mail address for the password. Retrieve the file *fipindex*. This contains a list of the files available on STIS and additional instructions.

## Getting Started With the On-Line System

**If you are on the Internet:** *telnet stis.nsf.gov*. If you cannot connect, try *telnet 128.150.195.40*. At the login prompt, enter *public*.

**If you are dialing in with a modem:** Choose 1200, 2400, or 9600 baud, 7-E-1. Dial 202-357-0359 or 202-357-0360. When connected, press Enter. At the login prompt, enter *public*.

## Getting Started With Direct E-Mail

Send an E-mail message to [stisserv@nsf.gov](mailto:stisserv@nsf.gov) (Internet) or [stisserv@NSF](mailto:stisserv@NSF) (BITNET). Put the following in the text:

Request: stis  
Topic: stisdirm

You will receive instructions for this service.

## Getting Started With WAIS

The NSF WAIS server is [stis.nsf.gov](http://stis.nsf.gov) (128.150.195.40). You can get the ".src" file from the "Directory of Servers" at [quake.think.com](http://quake.think.com).

## For More Information

For additional assistance contact:

E-mail: [stis-request@nsf.gov](mailto:stis-request@nsf.gov) (Internet)  
[stis-req@NSF](mailto:stis-req@NSF) (BITNET)  
Phone: 202-357-7555 (voice mail)  
TDD: 202-357-7492

# Acknowledgments

---

The fall 1991 Survey of Graduate Students and Postdoctorates in Science and Engineering was guided by J. G. Huckenpöhler, Ph.D., Science Resources Analyst, Division of Science Resources Studies, Science and Engineering Education and Human Resources Program (EDU), National Science Foundation, under the direction of Mary Golladay, Ph.D., Program Director, EDU. The National Institutes of Health co-sponsored the survey.

The fall 1991 survey was conducted by Quantum Research Corporation (QRC) of Bethesda, MD, under NSF contract number SRS-91-00714. QRC staff members who worked on this project were Barbara K. DePaul, Eyvette Harris, M.A. Holubek, Pamela G. Krones, Chuck Lyon, George J. Nozicka, Carlos Reyes, and Steve Toleque.

# Contents

---

<i>Section</i>	<i>Page</i>
Data Summary . . . . .	iii
General Notes . . . . .	ix
I. Detailed Statistical Tables . . . . .	1
II. Technical Notes . . . . .	309
Technical Tables	
<i>Table</i>	
II-1. The NSF data collection series: 1966-91 . . . . .	310
II-2. Science and engineering departmental population at doctorate-granting institutions by field: 1983-91 . . . . .	311
II-3. Science and engineering departmental population at master's-granting institutions by field: 1983-91 . . . . .	312
II-4. Departmental response rates: 1975-91 . . . . .	315
II-5. Imputation for nonresponse at doctorate-granting institutions by area of science and engineering and enrollment status: 1991 . . . . .	315
II-6. Imputation rates for all departments at doctorate-granting institutions: fall 1991 . . . . .	316
II-7. Imputation for nonresponse at master's-granting institutions by area of science and engineering and enrollment status: 1991 . . . . .	317
II-8. Imputation rates for all departments at master's-granting institutions: fall 1991 . . . . .	318
II-9. Comparison of graduate enrollment data as originally published and as modified through the fall of 1991 graduate student survey cycle: 1975-1991 . . . . .	320
III. List of institutions included in the fall 1991 survey . . . . .	321
III-1. Doctorate-granting institutions in the fall 1991 survey . . . . .	322
III-2. Master's-granting institutions in the fall 1991 survey . . . . .	326
IV. Instructions, Survey Instruments, and Summaries . . . . .	329

# General Notes

---

The data presented in this report were collected in the 20th annual National Science Foundation/National Institutes of Health (NSF/NIH) Survey of Graduate Students and Postdoctorates in Science and Engineering, covering 1991. The survey universe is composed of all U.S. institutions with departments or programs offering courses of study at the postbaccalaureate level in any science and engineering (S&E) field. Medical schools and other specialized institutions in health-related fields with postdoctoral programs or S&E master's or doctoral programs are also included. The 1991 survey universe included 333 doctorate-granting institutions and 276 master's-granting institutions.

Section I, subsection A, presents national totals for all institutions, both doctorate- and master's-granting, for fall 1991 (academic year 1991-92). Subsection B contains trend data for all graduate institutions for the period 1983-91; subsection C contains trend statistics for doctorate-granting institutions only; subsection D presents similar trend data for master's-granting institutions. Subsection E contains institutional listings and subsection F contains rankings of individual institutions on the basis of fall 1991 data.

Section II presents a description of the survey methodology and response analysis. Section III lists the institutions surveyed by degree level, along with their identifying Federal Interagency Committee on Education (FICE) codes.

Section IV displays copies of the survey instruments, along with summary questionnaire facsimiles containing data for all departments or for selected groups of departments. The facsimiles present data for all institutions, doctorate-granting institutions, master's-granting institutions, and other selected groups of institutions.

Tables showing data for doctorate-granting institutions include all institutions with any school (medical school, dental school, etc.) or branch campus that granted S&E doctorates for all years in which such degrees were offered. This definition differs from that used by the National Center for Education Statistics (NCES), which considers only those institutions that granted "significant numbers" of doctoral degrees as doctorate-granting.

## Data Limitations

In any analysis of the data in this report, the following definitions and limitations should be kept in mind:

- In tables showing full-time graduate enrollment by source of support, "institutional support" includes those students receiving their primary support from State and local government sources as well as from their institutions.

- "Other U.S. sources" includes students supported by industrial firms, nonprofit institutions (independent research institutes, professional societies, philanthropic foundations, etc.), and all other sources of support originating within the United States. "Other U.S. sources" does not include loans, family money, or personal savings used by students supporting themselves. Students supported primarily by foreign industrial firms, as well as by foreign governments, are reported under "foreign sources."
- "Imputation," as defined by NSF, denotes a computerized process that estimates data for totally or partially nonrespondent institutions based on their own data from earlier years, if available, or data from peer institutions. Data can be imputed for an entire institution, a department, or individual cells for which the institution or department was unable to provide actual data. The imputation procedures are described in detail in section II, Technical Notes.
- Respondent institutions can revise prior-year data as well as current data during the editing process. Consequently, only the trend data from the current report should be used in historical analyses.

### Data Availability

Because of the large number of tables (more than 650 in 1991) generated on the basis of graduate S&E enrollment data, it is not feasible to include the full set of tables in a general-audience publication such as this. To meet the needs of those interested in more detailed data of a specific type, NSF has developed a series of "Supplementary Data Releases" focusing on specific data topics. The 16 pamphlets available are listed on the order blank provided at the back of this book.

Data published in this report are also available on diskettes and in machine-readable form on magnetic tapes. Single- or multi-year data tapes are available with data for fall 1975 through fall 1991. Information on tape formats and the years for which they are available, together with prices and instructions for ordering, can be found in the current data user guide, *Guide to the National Science Foundation's Surveys of Academic Science and Engineering*. To obtain a copy of the guide, contact Dr. J. G. Huckenpöhler, who can also supply further information on the Survey of Graduate Students and Postdoctorates in Science and Engineering. His address and telephone number are:

Science and Engineering Education and Human Resources Program  
Room L-609  
National Science Foundation  
1800 G Street, N.W.  
Washington, DC 20550  
(202) 634-4787

Selected data items for individual doctorate-granting institutions are available on computer-generated Institutional Profiles. These profiles cover data from this survey as well as data collected in NSF's other academic S&E surveys covering research and

development (R&D) expenditures and Federal support to academic institutions. Institutional Profiles for any institution or group of institutions can be ordered by FICE code (listed in section III) through Mr. Richard Bennof. He can be reached at the following address and telephone number:

Science and Engineering Activities Program  
Room L-609  
National Science Foundation  
1800 G Street, N.W.  
Washington, DC 20550  
(202) 634-4252

Institutional planners can now obtain data from several academic S&E resources on CD-ROM compact disc. The compact disc contains the Computer Aided Science Policy Analysis and Research (CASPAR) database system, which is an easy-to-use tool for the retrieval and analysis of statistical data on academic science and engineering resources. CASPAR provides an extensive and growing data library with multi-year statistics on the state of higher education in general, and on academic S&E resources specifically. This data library is based on a set of standard institutional and field of science definitions across the multiple sources used to develop the database. The CASPAR program includes built-in help capabilities to facilitate the use and interpretation of the data.

CASPAR data are drawn from a number of sources. All data are available for individual institutions, by State, and at the national level. Longitudinal data from surveys of universities and colleges conducted by the NSF Division of Science Resources Studies include the R&D Expenditures Survey and the Federal Support Survey besides the Graduate Student Survey. Data from the surveys of universities and colleges conducted by NCES include Earned Degrees, Opening Fall Enrollment, Faculty Salaries, Tenure and Fringe Benefits, and Financial Statistics. Data from other sources include the National Research Council Doctorate Program Ratings. For additional information on CASPAR, contact:

Quantum Research Corporation  
Attn: CASPAR  
7315 Wisconsin Avenue, Suite 631W  
Bethesda, MD 20814



## Section I.

---

# Detailed Statistical Tables

To obtain accurate historical data, use only the latest detailed statistical tables for fall 1991 and not data published earlier. Institutions often revise data from previous years when important changes occur in reporting practices and program classifications, and only the latest tables incorporate such changes.

### Table

### Page

#### ALL GRADUATE INSTITUTIONS: 1991

##### Graduate Students

##### By field . . .

- A-1. and enrollment status according to highest degree granted . . . . . 13
- A-2. sex, and level of department according to control . . . . . 14
- A-3. and citizenship, and by racial/ethnic background of U.S. citizen . . . . . 15

##### By geographic distribution and . . .

- A-4. citizenship, and by racial/ethnic background of U.S. citizens . . . . . 16
- A-5. and enrollment status according to highest degree granted . . . . . 17

##### Full-Time Students

##### By field . . .

- A-6. level of study, citizenship, and sex according to control . . . . . 18

##### By . . . and citizenship, and by racial/ethnic background of U.S. citizens

- A-7. field . . . . . 19
- A-8. geographic distribution . . . . . 20

##### Part-Time Students

##### By field . . .

- A-9. and sex according to control . . . . . 21



**Table****Page**

By . . . and citizenship, and by racial/ethnic background of U.S. citizens

A-10. field . . . . . 22

A-11. geographic distribution . . . . . 23

**HISTORICALLY BLACK COLLEGES AND UNIVERSITIES: 1991****Graduate Students**

By field . . .

A-12. and enrollment status according to highest degree granted . . . . . 24

A-13. sex, and level of department according to control . . . . . 25

A-14. and citizenship, and by racial/ethnic background of U.S. citizen . . . . . 26

**LAND-GRANT INSTITUTIONS: 1991****Graduate Students**

By field and . . .

A-15. enrollment status according to highest degree granted . . . . . 27

A-16. citizenship, and by racial/ethnic background of U.S. citizens . . . . . 28

**POSTDOCTORAL APPOINTEES AND OTHER NONFACULTY DOCTORAL  
RESEARCH STAFF IN DOCTORATE-GRANTING INSTITUTIONS: 1991****Postdoctoral Appointees**

By field and source of support, . . .

A-17. and number of postdoctoral appointees who were non-U.S. citizens . . . . . 29

**Postdoctoral Appointees and Other Nonfaculty Doctoral Research Staff**

By . . .

A-18. field and sex . . . . . 30

**ALL GRADUATE INSTITUTIONS, LONG-TERM TRENDS: 1975-91****Graduate Students**

. . . and field

B-1.	Total enrollment by level . . . . .	31
B-2.	By enrollment status . . . . .	32
B-3.	By sex . . . . .	34

**Full-Time Students**

Full-time by . . . and field

B-4.	sex . . . . .	36
B-5.	citizenship . . . . .	38

**Part-Time Students**

Part-time by . . . and field

B-6.	sex . . . . .	40
------	---------------	----

**HISTORICALLY BLACK COLLEGES AND UNIVERSITIES,  
LONG-TERM TRENDS: 1975-91**

By . . .

B-7.	enrollment status and field . . . . .	42
------	---------------------------------------	----

**LAND-GRANT INSTITUTIONS, LONG-TERM TRENDS: 1975-91****Graduate Students**

By . . .

B-8.	enrollment status and field . . . . .	44
------	---------------------------------------	----

**ALL GRADUATE INSTITUTIONS, TRENDS: 1983-91****Graduate Students**

By . . .

B-9.	field . . . . .	46
B-10.	geographic distribution . . . . .	47

**Table****Page****Male by . . .**

B-11. field . . . . .	48
B-12. geographic distribution . . . . .	49

**Female by . . .**

B-13. field . . . . .	50
B-14. geographic distribution . . . . .	51

**In . . . institutions by field**

B-15. public . . . . .	52
B-16. private . . . . .	53

**By . . .**

B-17. field and citizenship, and racial/ethnic background of U.S. citizens . . . . .	54
--	----

**Full-Time Students****By . . .**

B-18. field . . . . .	57
B-19. geographic distribution . . . . .	58

**. . . by field**

B-20. Male . . . . .	59
B-21. Female . . . . .	60

**In . . . institutions by field**

B-22. public . . . . .	61
B-23. private . . . . .	62

**. . . by field**

B-24. First-year . . . . .	63
B-25. Beyond first-year . . . . .	64

**By field and . . .**

B-26. citizenship, and racial/ethnic background of U.S. citizens . . . . .	65
B-27. source of major support . . . . .	68

**Table****Page**

## Supported by . . . sources by field

B-28. Federal . . . . .	72
B-29. institutional . . . . .	73
B-30. other outside . . . . .	74

## Self-supported . . .

B-31. by field . . . . .	75
--------------------------	----

## By . . . of major support

B-32. field and type . . . . .	76
B-33. type and source . . . . .	78

## . . . by type and source of major support

B-34. Science . . . . .	80
B-35. Engineering . . . . .	82
B-36. Health fields . . . . .	84

## . . . U.S. citizenship by field

B-37. With . . . . .	86
B-38. Without . . . . .	87

**Part-Time Students**

## By . . .

B-39. field . . . . .	88
B-40. geographic distribution . . . . .	89

## . . . by field

B-41. Male . . . . .	90
B-42. Female . . . . .	91

## In . . . institutions by field

B-43. public . . . . .	92
B-44. private . . . . .	93

**Table****Page**

By . . .

B-45. field and citizenship, and racial/ethnic background of U.S. citizens . . . . .	94
. . . U.S. citizenship by field	
B-46. With . . . . .	97
B-47. Without . . . . .	98

**HISTORICALLY BLACK COLLEGES AND UNIVERSITIES, TRENDS: 1983-91****Graduate Students**

By . . .

B-48. field . . . . .	99
. . . by field	
B-49. Male . . . . .	100
B-50. Female . . . . .	101

**Full-Time Students**

By . . .

B-51. field . . . . .	102
B-52. type and source of major support . . . . .	103

**Part-Time Students**

By . . .

B-53. field . . . . .	105
-----------------------	-----

**LAND-GRANT INSTITUTIONS, TRENDS: 1983-91****Graduate Students**

By . . .

B-54. field . . . . .	106
. . . by field	
B-55. Male . . . . .	107
B-56. Female . . . . .	108

**Table****Page****Full-Time Students**

By . . .

B-57. field . . . . .	109
B-58. type and source of major support . . . . .	110

**Part-Time Students**

By . . .

B-59. field . . . . .	112
-----------------------	-----

**DOCTORATE-GRANTING INSTITUTIONS, LONG-TERM TRENDS: 1975-91****Graduate Students**

By . . . and field

C-1. enrollment status . . . . .	114
C-2. sex . . . . .	116

**Full-Time Students**

By . . . and field

C-3. sex . . . . .	118
C-4. citizenship . . . . .	120

**Part-Time Students**

By . . .

C-5. sex and field . . . . .	122
------------------------------	-----

**DOCTORATE-GRANTING INSTITUTIONS, TRENDS: 1983-91****Graduate Students**

By . . .

C-6. field . . . . .	124
C-7. geographic distribution . . . . .	125

**Table****Page****Male by . . .**

C-8. field . . . . .	126
C-9. geographic distribution . . . . .	127

**Female by . . .**

C-10. field . . . . .	128
C-11. geographic distribution . . . . .	129

**In . . . institutions by field**

C-12. public . . . . .	130
C-13. private . . . . .	131

**By . . . and by racial/ethnic background of U.S. citizens**

C-14. enrollment status and citizenship, . . . . .	132
C-15. field and citizenship, . . . . .	133

**Full-Time Students****By . . .**

C-16. field . . . . .	136
C-17. geographic distribution . . . . .	137

**By . . . of major support**

C-18. field and source . . . . .	138
C-19. field and type . . . . .	142
C-20. type and source . . . . .	144

**. . . U.S. citizenship by field**

C-21. With . . . . .	146
C-22. Without . . . . .	147

**Part-Time Students****By . . .**

C-23. field . . . . .	148
C-24. geographic distribution . . . . .	149

**Table****Page****Postdoctoral Appointees**

By . . .

C-25. field . . . . .	150
C-26. geographic distribution . . . . .	151

Supported by . . . sources by field

C-27. Federal . . . . .	152
C-28. non-Federal . . . . .	153

. . . U.S. citizenship by field

C-29. With . . . . .	154
C-30. Without . . . . .	155

**Non-faculty Scientists and Engineers**

By . . .

C-31. field . . . . .	156
C-32. geographic distribution . . . . .	157

**MASTER'S-GRANTING INSTITUTIONS, LONG-TERM TRENDS: 1983-91****Graduate Students**

By . . . and field

D-1. enrollment status . . . . .	158
D-2. sex . . . . .	160

**MASTER'S-GRANTING INSTITUTIONS, TRENDS: 1983-91****Graduate Students**

By . . .

D-3. field . . . . .	162
----------------------	-----

. . . by field

D-4. Male . . . . .	163
D-5. Female . . . . .	164



**Table****Page****In . . . institutions by field**

D-6. public . . . . .	165
D-7. private . . . . .	166

**By . . .**

D-8. enrollment status and citizenship, and by racial/ethnic background of U.S. citizens . . . . .	167
---	-----

**Full-Time Students****By . . .**

D-9. field . . . . .	168
----------------------	-----

**Part-Time Students****By . . .**

D-10. field . . . . .	169
-----------------------	-----

**LISTINGS OF INSTITUTIONS: 1991****Graduate Students****. . . by geographic division, State, institution, and . . .**

E-1. Enrollment in the science, engineering and health fields . . . area of study .	170
E-2. Science enrollment . . . major field of science . . . . .	181
E-3. Engineering enrollment . . . major field of engineering . . . . .	192
E-4. Enrollment in the science, engineering, and health fields . . . citizenship, and racial/ethnic background of U.S. citizens . . . . .	203

**INSTITUTIONAL RANKINGS: 1991****Graduate Students****Science and engineering enrollment in doctorate-granting institutions  
. . . ranked by total graduate science and engineering enrollment**

F-1. by enrollment status and total postdoctoral appointees . . . . .	214
F-2. by area . . . . .	220

. . . science and engineering enrollment, by enrollment status and . . .  
postdoctoral appointees in doctorate-granting institutions,  
ranked by . . . graduate science and engineering enrollment

F-3. Male . . . male . . . male . . . . .	226
F-4. Female . . . female . . . female . . . . .	232

Minority science and engineering enrollment in doctorate-granting institutions . . .

F-5. by racial ethnic/background, ranked by total minority graduate science and engineering enrollment . . . .	238
---	-----

Graduate science and engineering students . . . U.S. citizenship,  
in doctorate-granting institutions,  
by enrollment status,  
and postdoctoral appointees . . . U.S. citizenship, ranked  
by . . . graduate science and engineering enrollment

F-6. with . . . with . . . U.S. citizen . . . . .	244
F-7. without . . . without . . . non-U.S. citizen . . . . .	250

### Full-Time Students

Science and engineering enrollment in doctorate-granting institutions . . . ,  
ranked by . . . full-time graduate science and engineering enrollment

F-8. by source of major support, . . . . .	256
F-9. receiving Federal support, by agency source of major support, . . . Federally supported . . . . .	262
F-10. by type of major support, . . . . .	268

### Graduate Students

. . . enrollment in doctorate-granting institutions,  
ranked by 1991 total graduate . . . enrollment: 1984-91

F-11. Science and engineering . . . science and engineering . . . . .	274
F-12. Science . . . science . . . . .	280
F-13. Engineering . . . engineering . . . . .	286
F-14. Health fields . . . health fields . . . . .	292

Science and engineering enrollment, by enrollment status,  
and total postdoctoral appointees in . . .  
ranked by total graduate science and engineering enrollment

F-15. master's granting institutions, . . . . .	298
F-16. historically black colleges and universities, . . . . .	303
F-17. land-grant institutions, . . . . .	304

Graduate enrollment in science & engineering and the health fields . . .  
ranked by total graduate enrollment in surveyed fields

F-18. in medical schools, by area, . . . . . 306

**Table A-1. Science and engineering graduate students by field and enrollment status  
in all institutions according to highest degree granted: 1991**

Page 1 of 1

Field	In all institutions			Doctorate-granting			Master's-granting		
	Total	Full-time	Part-time	Total	Full-time	Part-time	Total	Full-time	Part-time
Total, all surveyed fields .....	475,691	308,669	167,022	411,296	268,753	124,540	64,395	21,913	42,482
Total, science/engineering fields .....	415,240	277,898	137,342	360,723	259,484	101,239	54,517	18,414	36,103
Engineering, total .....	114,407	71,230	43,177	105,092	68,925	38,137	9,315	2,305	7,010
Aerospace .....	4,041	3,314	727	3,974	3,247	727	67	0	0
Agricultural .....	983	825	158	983	825	158	0	0	0
Biomedical .....	2,233	1,921	312	2,185	1,896	289	48	25	23
Chemical .....	7,127	5,788	1,339	7,000	5,733	1,267	127	55	72
Civil .....	17,265	11,214	6,051	15,985	10,836	5,149	1,280	378	902
Electrical .....	35,272	19,968	15,284	31,780	19,181	12,599	3,492	807	2,685
Engineering science .....	2,154	1,364	790	2,124	1,357	767	30	7	23
Industrial .....	13,333	5,705	7,828	11,773	5,422	6,351	1,560	283	1,277
Mechanical .....	17,820	11,654	6,166	16,620	11,371	5,249	1,200	283	917
Metallurgical/materials .....	5,149	4,059	1,000	4,895	4,034	861	154	25	129
Mining .....	489	336	153	475	325	150	14	11	3
Nuclear .....	1,282	1,080	202	1,282	1,080	202	0	0	0
Petroleum .....	711	521	190	700	514	186	11	7	4
Engineering, n.e.c. ....	6,548	3,461	3,087	5,216	3,104	2,112	1,332	357	975
Sciences, total .....	300,833	206,668	94,165	255,631	190,559	65,072	45,202	16,109	29,093
Physical sciences .....	34,900	30,131	4,789	32,938	29,384	3,574	1,982	767	1,195
Astronomy .....	829	810	19	829	810	19	0	0	0
Chemistry .....	19,422	16,896	2,726	18,317	16,289	2,028	1,105	407	698
Physics .....	14,221	12,482	1,739	13,576	12,158	1,418	645	324	321
Physical sciences, n.e.c. ....	428	143	285	216	107	109	212	36	176
Earth, atmospheric, & ocean sciences .....	14,747	10,414	4,333	13,224	9,880	3,344	1,523	534	989
Atmospheric sciences .....	968	859	109	956	857	99	12	2	10
Geosciences .....	7,628	5,891	1,937	7,088	5,472	1,596	560	219	341
Oceanography .....	2,293	1,898	395	2,173	1,834	339	120	64	56
Earth, atmos., & ocean sci., n.e.c. ....	3,858	1,966	1,892	3,027	1,717	1,310	831	249	582
Mathematical sciences .....	19,992	14,259	5,733	17,526	13,525	4,001	2,466	734	1,732
Computer sciences .....	34,728	16,552	18,176	27,693	14,583	13,110	7,035	1,969	5,066
Agricultural sciences .....	11,475	9,238	2,237	10,747	8,793	1,954	728	445	283
Biological sciences .....	52,120	42,929	9,191	48,093	41,282	6,811	4,027	1,647	2,380
Anatomy .....	1,046	956	90	1,046	956	90	0	0	0
Biochemistry .....	5,216	4,967	249	5,175	4,953	222	41	14	27
Biology .....	13,486	9,594	3,892	10,437	8,293	2,144	3,049	1,301	1,748
Biometry/epidemiology .....	2,068	1,446	620	2,066	1,448	620	0	0	0
Biophysics .....	683	645	18	683	645	18	0	0	0
Botany .....	2,661	2,276	385	2,611	2,229	382	50	47	3
Cell biology .....	2,804	2,711	93	2,804	2,711	93	0	0	0
Ecology .....	1,226	936	290	1,125	925	200	101	11	90
Entomology/parasitology .....	1,171	1,014	157	1,171	1,014	157	0	0	0
Genetics .....	1,524	1,418	106	1,482	1,375	107	42	41	1
Microbiology .....	4,937	4,409	528	4,879	4,400	479	58	9	49
Nutrition .....	4,251	2,959	1,292	3,919	2,857	1,062	332	102	230
Pathology .....	1,517	1,168	351	1,446	1,136	308	71	28	43
Pharmacology .....	2,438	2,308	128	2,436	2,308	128	0	0	0
Physiology .....	2,329	2,180	169	2,329	2,180	169	0	0	0
Zoology .....	2,192	1,784	408	2,173	1,765	408	19	19	0
Biosciences, n.e.c. ....	2,595	2,182	413	2,331	2,107	224	264	75	189
Psychology .....	51,592	32,382	19,210	36,358	26,052	10,306	15,234	6,330	8,904
Social sciences .....	81,279	50,763	30,516	69,052	47,080	21,972	12,227	3,883	8,544
Agricultural economics .....	2,386	2,003	383	2,313	1,968	345	53	35	18
Anthropology .....	6,695	5,036	1,859	6,410	4,928	1,482	285	108	177
Economics (except agricultural) .....	12,709	9,730	2,979	11,906	9,414	2,492	803	318	487
Geography .....	3,785	2,574	1,211	3,123	2,332	791	662	242	420
History and philosophy of science .....	383	340	43	383	340	43	0	0	0
Linguistics .....	3,452	2,597	855	3,102	2,546	556	350	51	299
Political science .....	31,929	16,126	15,803	25,073	14,250	10,823	6,856	1,876	4,980
Sociology .....	8,314	5,848	2,468	7,223	5,447	1,776	1,091	399	692
Sociology/anthropology .....	1,028	687	341	953	646	307	75	41	34
Social sciences, n.e.c. ....	10,618	5,824	4,794	8,566	5,209	3,357	2,052	615	1,437
Total, health fields .....	60,451	30,771	29,680	50,573	27,272	23,301	9,878	3,499	6,379
Dentistry .....	1,030	889	141	1,030	889	141	0	0	0
Neurology .....	1,008	978	28	981	968	13	25	10	15
Nursing .....	22,289	8,492	15,797	18,640	5,588	13,052	3,649	904	2,745
Pharmaceutical sciences .....	3,152	2,272	880	3,151	2,272	879	1	0	1
Preventive medicine/community health .....	8,595	4,500	4,095	8,321	4,446	3,875	274	54	220
Speech pathology/audiology .....	9,319	6,646	2,673	8,889	5,124	1,765	2,430	1,522	908
Veterinary sciences .....	894	717	177	875	706	169	19	11	8
Clinical medicine, n.e.c. ....	2,064	1,612	452	1,892	1,563	329	172	49	123
Health related, n.e.c. ....	12,102	6,665	5,437	8,794	5,716	3,078	3,308	949	2,356

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table A-2. Science and engineering graduate students by field, sex, and level of department, in all institutions according to control: 1991

Page 1 of 1

Field	Total	Control		Sex		Level of department	
		Public	Private	Men	Women	Doctorate 1/	Masters
Total, all surveyed fields	475,691	333,690	142,001	287,385	168,308	334,444	141,247
Total, science/engineering fields	415,240	289,518	125,724	273,529	141,711	305,686	109,554
Engineering, total	114,407	79,872	34,535	98,551	15,856	91,331	23,078
Aerospace	4,041	3,162	879	3,716	325	3,599	442
Agricultural	983	943	40	858	125	902	81
Biomedical	2,233	1,311	922	1,649	584	2,096	137
Chemical	7,127	5,168	1,961	5,867	1,260	6,742	385
Civil	17,265	12,095	4,270	14,101	3,164	13,531	3,734
Electrical	35,272	22,572	12,700	31,397	3,875	28,887	6,385
Engineering science	2,154	1,387	767	1,886	268	1,553	601
Industrial	13,333	8,968	4,365	10,931	2,402	7,411	5,922
Mechanical	17,820	12,799	5,021	16,293	1,527	15,334	2,486
Metallurgical/materials	5,149	3,450	1,699	4,164	985	4,890	259
Mining	489	359	130	439	50	304	185
Nuclear	1,282	1,093	189	1,105	177	1,248	38
Petroleum	711	576	135	659	52	567	144
Engineering, n.e.c.	6,548	5,113	1,435	5,506	1,042	4,269	2,279
Sciences, total	300,833	209,644	91,189	174,978	125,855	214,355	80,478
Physical sciences	34,900	25,227	9,673	26,302	8,598	31,241	3,650
Astronomy	829	546	283	657	172	808	21
Chemistry	19,422	13,967	5,455	13,153	6,269	17,527	1,895
Physics	14,221	10,328	3,893	12,224	1,997	12,961	1,360
Physical sciences, n.e.c.	428	393	35	268	160	45	383
Earth, atmospheric, & ocean sciences	14,747	12,291	2,456	10,251	4,496	11,070	3,677
Atmospheric sciences	968	848	20	778	190	916	52
Geosciences	7,628	6,282	1,346	5,805	2,023	6,057	1,571
Oceanography	2,293	1,918	375	1,491	802	2,095	198
Earth, atmos., & ocean sci., n.e.c.	3,858	3,143	715	2,377	1,481	2,002	1,858
Mathematical sciences	19,992	15,607	4,385	13,708	6,286	14,807	5,185
Computer sciences	34,728	20,928	13,800	28,452	6,276	20,047	14,681
Agricultural sciences	11,475	10,955	520	7,887	3,588	9,369	2,106
Biological sciences	52,120	38,242	13,878	27,823	24,297	44,351	7,789
Anatomy	1,046	780	266	547	499	1,007	39
Biochemistry	5,216	3,553	1,663	3,074	2,142	5,124	92
Biology	13,488	10,030	3,458	7,201	6,285	8,598	4,890
Biometry/epidemiology	2,086	1,287	799	921	1,145	1,877	189
Biophysics	663	353	310	500	163	683	0
Botany	2,681	2,489	172	1,802	1,059	2,506	155
Cell biology	2,804	1,587	1,217	1,524	1,280	2,748	58
Ecology	1,226	1,032	194	689	537	1,052	174
Entomology/parasitology	1,171	1,102	69	830	341	1,130	41
Genetics	1,524	1,062	462	763	761	1,451	73
Microbiology	4,937	3,578	1,359	2,578	2,359	4,741	196
Nutrition	4,251	3,545	706	1,294	2,057	3,269	982
Pathology	1,517	1,060	457	881	636	1,283	234
Pharmacology	2,438	1,874	762	1,301	1,135	2,432	4
Physiology	2,329	1,530	799	1,368	961	2,183	146
Zoology	2,192	2,041	151	1,311	881	2,138	54
Biosciences, n.e.c.	2,595	1,579	1,016	1,459	1,136	2,151	444
Psychology	51,592	28,867	22,725	16,801	34,991	31,896	19,696
Social sciences	81,279	57,527	23,752	45,956	35,323	51,574	29,705
Agricultural economics	2,368	2,251	115	1,735	631	2,003	363
Anthropology	6,695	4,949	1,746	2,768	3,927	5,485	1,210
Economics (except agricultural)	12,709	8,389	4,320	9,153	3,556	10,396	2,313
Geography	3,785	3,588	199	2,460	1,325	2,210	1,575
History and philosophy of science	383	214	169	237	146	383	0
Linguistics	3,452	2,408	1,044	1,541	1,911	2,539	913
Political science	31,929	21,027	10,902	18,065	13,864	16,476	15,453
Sociology	8,314	6,458	1,856	3,735	4,579	6,360	1,954
Sociology/anthropology	1,028	662	366	459	569	610	418
Social sciences, n.e.c.	10,618	7,583	3,035	5,603	4,815	5,112	5,506
Total, health fields	60,451	44,174	16,277	13,856	46,595	28,758	31,693
Dentistry	1,030	805	225	725	305	219	811
Neurology	1,006	519	487	572	434	961	25
Nursing	22,269	16,764	5,525	1,195	21,094	10,203	12,088
Pharmaceutical sciences	3,152	2,286	866	1,825	1,327	2,723	429
Preventive medicine/community health	8,595	5,979	2,616	3,368	5,227	5,911	2,684
Speech pathology/audiology	9,319	7,818	1,501	784	8,535	3,518	5,801
Veterinary sciences	894	821	73	528	366	742	152
Clinical medicine, n.e.c.	2,084	1,356	708	1,052	1,012	1,161	903
Health related, n.e.c.	12,102	7,826	4,276	3,807	8,295	3,300	8,802

1/ Includes all students enrolled in doctorate-level departments

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table A-3. Science and engineering graduate students in all institutions, by field and citizenship, and by racial/ethnic background of U.S. citizens: 1991**

Page 1 of 1

Field	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/Alaskan Native	Asian/Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Total, all surveyed fields	475,691	16,542	1,448	20,201	13,407	291,631	19,392	113,070
Total, science & engineering fields	415,240	13,698	1,201	18,217	11,168	245,172	17,378	108,408
Engineering, total	114,407	2,034	189	7,203	2,179	55,020	6,483	41,319
Aerospace	4,041	44	5	196	54	2,134	386	1,222
Agricultural	963	4	1	28	13	408	12	517
Biomedical	2,233	38	3	138	40	1,224	56	734
Chemical	7,127	119	22	428	159	3,150	100	3,151
Civil	17,285	277	34	830	382	8,617	635	6,490
Electrical	35,272	668	40	3,104	663	15,633	2,428	12,736
Engineering science	2,154	34	4	115	26	1,240	28	707
Industrial	13,333	396	40	592	261	7,208	969	3,867
Mechanical	17,820	246	21	942	371	8,431	1,133	6,676
Metallurgical/materials	5,149	55	1	260	56	2,505	118	2,154
Mining	489	1	0	4	7	200	13	284
Nuclear	1,282	16	2	30	25	671	18	520
Petroleum	711	2	4	12	10	237	3	443
Engineering, n.e.c.	6,548	134	12	526	112	3,382	584	1,838
Sciences, total	300,833	11,662	1,012	11,014	8,989	190,152	10,915	67,089
Physical sciences	34,900	698	62	1,398	657	18,543	768	12,774
Astronomy	829	11	2	30	11	544	14	217
Chemistry	19,422	477	43	788	395	10,448	382	6,879
Physics	14,221	189	15	549	242	7,257	351	5,618
Physical sciences, n.e.c.	428	21	2	21	9	294	21	60
Earth, atmospheric, & ocean sciences	14,747	147	29	263	249	10,784	374	2,901
Atmospheric sciences	968	6	0	28	24	589	11	310
Geosciences	7,628	60	20	137	115	5,571	198	1,527
Oceanography	2,293	24	3	32	58	1,487	105	584
Earth, atmos., & ocean sci., n.e.c.	3,858	57	6	66	52	3,137	60	480
Mathematical sciences	19,992	518	20	865	349	10,483	1,132	6,625
Computer sciences	34,728	1,087	42	2,839	629	16,636	2,099	11,396
Agricultural sciences	11,475	147	32	219	279	7,426	155	3,217
Biological sciences	52,120	1,319	208	2,425	1,391	33,236	1,093	12,450
Anatomy	1,046	24	2	61	23	682	4	250
Biochemistry	5,216	79	13	301	83	2,923	37	1,780
Biology	13,486	455	41	823	553	9,211	490	2,113
Biometry/epidemiology	2,066	73	6	99	90	1,275	13	510
Biophysics	863	6	2	30	5	385	0	235
Botany	2,661	40	6	46	37	1,802	25	905
Cell biology	2,804	40	5	152	71	1,869	27	640
Ecology	1,226	11	5	19	26	976	23	166
Entomology/parasitology	1,171	19	1	32	37	702	16	364
Genetics	1,524	29	0	112	22	1,030	4	327
Microbiology	4,937	94	6	239	118	3,077	129	1,274
Nutrition	4,251	131	90	163	89	2,403	125	1,250
Pathology	1,517	37	3	68	18	978	44	369
Pharmacology	2,436	83	14	140	65	1,452	35	647
Physiology	2,329	86	2	188	49	1,338	33	655
Zoology	2,192	37	7	27	34	1,693	36	358
Biosciences, n.e.c.	2,595	75	3	145	71	1,642	52	607
Psychology	51,592	2,493	253	1,046	2,432	41,155	2,215	1,998
Social sciences	81,279	5,253	368	1,959	3,003	51,889	3,079	15,728
Agricultural economics	2,368	60	4	33	42	1,124	11	1,092
Anthropology	6,695	129	67	116	205	5,093	266	819
Economics (except agricultural)	12,709	300	53	392	291	5,723	564	5,386
Geography	3,785	82	18	79	82	2,928	90	508
History and philosophy of science	383	6	0	8	6	302	4	57
Linguistics	3,452	145	7	90	132	1,726	92	1,260
Political science	31,929	2,779	114	780	1,439	21,831	1,391	3,595
Sociology	8,314	664	54	208	323	5,261	223	1,581
Sociology/anthropology	1,028	112	1	10	32	690	26	157
Social sciences, n.e.c.	10,618	976	50	243	451	7,211	412	1,275
Total, health fields	60,451	2,846	247	1,984	2,239	46,459	2,014	4,662
Dentistry	1,030	28	1	71	29	624	35	244
Neurology	1,006	17	4	88	27	708	5	177
Nursing	22,289	1,108	105	524	569	18,997	588	400
Pharmaceutical sciences	3,152	151	2	212	95	1,361	179	1,152
Preventive medicine/community health	8,595	569	49	420	651	5,451	219	1,236
Speech pathology/audiology	9,319	379	39	121	338	7,745	313	384
Veterinary sciences	894	43	1	19	12	557	24	238
Clinical medicine, n.e.c.	2,064	69	6	183	55	1,312	71	368
Health related, n.e.c.	12,102	484	40	366	463	9,704	582	463

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



**Table A-4. Science and engineering graduate students in all institutions by geographic distribution and citizenship, and by racial/ethnic background of U.S. citizens: 1991**

Page 1 of 1

Geographic distribution	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/Alaskan Native	Asian/Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Total, all institutions .....	475,691	16,542	1,448	20,201	13,407	291,631	19,392	113,070
New England .....	34,932	582	53	1,288	454	21,312	2,750	8,493
Connecticut .....	7,217	148	8	250	87	5,097	250	1,377
Maine .....	752	1	1	4	2	531	24	189
Massachusetts .....	22,896	395	39	912	318	12,882	2,351	5,999
New Hampshire .....	1,199	7	1	28	9	825	88	281
Rhode Island .....	2,184	28	4	54	27	1,427	54	560
Vermont .....	684	3	0	10	11	550	3	107
Middle Atlantic .....	82,009	2,991	201	3,704	1,855	47,909	5,702	19,647
New Jersey .....	11,860	343	89	871	227	6,691	949	2,690
New York .....	47,649	2,089	64	2,055	1,366	25,961	4,390	11,724
Pennsylvania .....	22,500	559	48	778	262	15,257	363	5,233
East North Central .....	83,758	2,980	181	2,849	1,277	52,286	1,950	22,235
Illinois .....	24,590	1,194	38	1,331	485	14,786	405	6,351
Indiana .....	10,111	229	8	240	122	6,607	166	2,739
Michigan .....	17,055	787	47	607	250	10,062	460	4,862
Ohio .....	21,944	641	51	449	273	13,845	910	5,775
Wisconsin .....	10,058	149	37	222	147	6,986	9	2,508
West North Central .....	30,873	479	58	818	270	19,446	1,217	8,585
Iowa .....	5,740	84	3	55	37	3,114	229	2,218
Kansas .....	5,478	67	14	118	74	3,275	442	1,488
Minnesota .....	7,398	78	8	180	40	4,913	395	1,784
Missouri .....	7,421	193	15	180	84	4,912	84	1,953
Nebraska .....	2,781	37	5	107	22	1,944	43	623
North Dakota .....	918	10	6	55	11	601	8	225
South Dakota .....	1,139	10	7	123	2	687	16	294
South Atlantic .....	71,967	4,368	145	2,314	1,582	47,181	1,045	15,312
Delaware .....	1,470	59	1	32	5	913	26	434
District of Columbia .....	8,728	949	28	358	183	4,708	499	2,106
Florida .....	14,600	697	37	361	812	9,390	186	3,137
Georgia .....	8,701	810	10	265	152	5,606	49	1,807
Maryland .....	10,241	611	13	419	130	6,404	144	2,520
North Carolina .....	10,282	561	33	316	107	7,278	24	1,963
South Carolina .....	3,993	150	4	65	31	2,580	49	1,114
Virginia .....	11,588	607	18	465	139	8,474	86	1,797
West Virginia .....	2,383	44	1	35	23	1,826	0	434
East South Central .....	20,271	1,326	48	544	148	13,408	322	4,475
Alabama .....	6,486	468	10	168	54	4,087	6	1,693
Kentucky .....	4,119	112	9	100	29	3,017	110	742
Mississippi .....	2,847	346	8	127	23	1,478	28	837
Tennessee .....	6,819	400	21	149	42	4,826	178	1,203
West South Central .....	45,631	1,630	212	1,968	1,683	27,033	652	12,453
Arkansas .....	2,312	120	6	14	9	1,465	354	324
Louisiana .....	5,921	397	7	228	70	3,076	102	2,041
Oklahoma .....	4,649	118	134	87	60	2,759	49	1,642
Texas .....	32,549	995	65	1,639	1,544	19,713	147	8,446
Mountain .....	29,434	285	187	711	895	20,145	665	6,546
Arizona .....	7,648	83	62	143	281	4,755	25	2,299
Colorado .....	9,350	137	40	313	234	7,060	191	1,375
Idaho .....	1,152	6	5	36	19	1,152	5	289
Montana .....	1,137	2	7	19	7	893	7	202
Nevada .....	1,296	16	3	43	21	853	117	243
New Mexico .....	3,176	29	37	39	299	2,052	37	683
Utah .....	4,286	10	16	96	26	2,753	123	1,262
Wyoming .....	1,029	2	17	22	8	627	160	193
Pacific .....	73,975	1,861	363	5,999	2,677	42,891	5,067	15,097
Alaska .....	690	5	3	17	5	508	37	115
California .....	60,097	1,739	294	5,205	2,504	34,205	4,722	11,428
Hawaii .....	2,092	12	13	368	12	863	30	794
Oregon .....	4,181	38	15	126	45	2,423	136	1,398
Washington .....	6,915	87	38	283	111	4,892	142	1,362
Outlying areas .....	2,841	0	0	6	2,568	20	22	227

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table A-5. Science and engineering graduate students by geographic distribution and enrollment status, in all institutions according to highest degree granted: 1991**

Page 1 of 1

Geographic distribution	In all institutions			Doctorate-granting			Master's-granting		
	Total	Full-time	Part-time	Total	Full-time	Part-time	Total	Full-time	Part-time
Total, all institutions .....	475,691	308,869	167,022	411,296	286,756	124,540	64,395	21,913	42,482
New England .....	34,932	23,574	11,358	30,768	22,723	8,045	4,164	851	3,313
Connecticut .....	7,217	4,085	3,132	4,540	3,657	883	2,677	428	2,249
Maine .....	752	592	160	752	592	160	0	0	0
Massachusetts .....	22,896	15,782	7,114	21,669	15,436	6,233	1,227	348	681
New Hampshire .....	1,199	951	248	1,059	931	128	140	20	120
Rhode Island .....	2,184	1,832	552	2,100	1,811	489	64	21	63
Vermont .....	684	532	152	648	496	152	36	36	0
Middle Atlantic .....	82,009	45,781	36,228	70,878	42,786	28,092	11,131	2,995	8,136
New Jersey .....	11,860	5,662	6,198	10,776	5,463	5,313	1,084	199	685
New York .....	47,649	26,121	21,528	40,706	24,425	18,281	6,943	1,696	5,247
Pennsylvania .....	22,500	13,998	8,502	19,396	12,898	6,498	3,104	1,100	2,004
East North Central .....	83,758	58,800	24,958	76,207	58,016	20,191	7,551	2,784	4,767
Illinois .....	24,590	16,819	7,771	20,561	15,367	5,194	4,029	1,452	2,577
Indiana .....	10,111	7,925	2,166	9,780	7,832	1,948	331	93	238
Michigan .....	17,055	11,244	5,811	15,621	10,600	4,821	1,434	444	990
Ohio .....	21,944	15,486	6,458	21,594	15,286	6,308	350	200	150
Wisconsin .....	10,058	7,326	2,732	8,651	6,731	1,920	1,407	595	812
West North Central .....	30,873	20,731	10,142	27,121	19,353	7,768	3,752	1,378	2,374
Iowa .....	5,740	4,547	1,193	5,507	4,498	1,009	233	49	184
Kansas .....	5,478	3,086	2,392	4,880	2,705	2,175	598	381	217
Minnesota .....	7,398	5,355	2,043	5,840	4,909	931	1,558	446	1,112
Missouri .....	7,421	4,474	2,947	6,695	4,103	2,592	726	371	355
Nebraska .....	2,781	1,661	1,120	2,144	1,530	614	637	131	506
North Dakota .....	916	757	159	916	757	159	0	0	0
South Dakota .....	1,139	851	288	1,139	851	288	0	0	0
South Atlantic .....	71,967	44,756	27,211	65,707	42,380	23,327	6,260	2,376	3,884
Delaware .....	1,470	1,076	394	1,447	1,075	372	23	1	22
District of Columbia .....	8,729	3,630	4,899	8,611	3,769	4,842	118	61	57
Florida .....	14,600	8,147	6,453	14,173	8,009	6,164	427	138	289
Georgia .....	8,701	6,239	2,462	7,795	5,786	2,009	906	453	453
Maryland .....	10,241	5,821	4,420	8,073	5,286	2,785	2,168	533	1,835
North Carolina .....	10,282	8,069	2,213	8,856	7,391	1,465	1,426	878	748
South Carolina .....	3,993	2,874	1,119	3,854	2,788	1,066	139	86	51
Virginia .....	11,588	7,396	4,192	10,994	7,021	3,973	594	375	219
West Virginia .....	2,363	1,304	1,059	1,904	1,255	649	459	49	410
East South Central .....	20,271	12,930	7,341	17,359	11,552	5,807	2,912	1,378	1,534
Alabama .....	6,486	4,056	2,430	5,757	3,575	2,182	729	481	248
Kentucky .....	4,119	2,811	1,508	3,315	2,175	1,140	804	436	368
Mississippi .....	2,847	2,221	626	2,550	2,077	473	297	144	153
Tennessee .....	6,819	4,042	2,777	5,737	3,725	2,012	1,082	317	765
West South Central .....	45,631	28,628	17,003	39,255	26,059	13,196	6,376	2,569	3,807
Arkansas .....	2,312	1,249	1,063	1,495	839	656	817	410	407
Louisiana .....	5,921	4,440	1,481	5,323	4,229	1,094	598	211	387
Oklahoma .....	4,849	2,581	2,268	4,622	2,500	2,122	227	81	146
Texas .....	32,549	20,358	12,191	27,815	18,491	9,324	4,734	1,867	2,867
Mountain .....	29,434	20,247	9,187	28,104	19,894	8,210	1,330	353	977
Arizona .....	7,648	5,308	2,340	7,648	5,308	2,340	0	0	0
Colorado .....	9,350	6,052	3,298	8,693	6,052	2,641	657	0	657
Idaho .....	1,512	840	672	1,512	840	672	0	0	0
Montana .....	1,137	950	187	1,046	874	172	91	76	15
Nevada .....	1,296	939	357	871	718	153	425	221	204
New Mexico .....	3,176	2,219	957	3,019	2,163	856	157	56	101
Utah .....	4,288	3,148	1,138	4,266	3,148	1,118	0	0	0
Wyoming .....	1,029	791	238	1,029	791	238	0	0	0
Pacific .....	73,975	51,107	22,868	53,068	43,890	9,178	20,907	7,217	13,690
Alaska .....	690	381	309	490	329	151	210	52	158
California .....	60,097	40,259	19,838	40,615	33,791	6,824	19,482	6,468	13,014
Hawaii .....	2,082	1,767	325	2,092	1,767	325	0	0	0
Oregon .....	4,181	3,315	866	4,074	3,269	805	107	48	61
Washington .....	6,915	5,385	1,530	5,807	4,734	1,073	1,108	851	457
Outlying areas .....	2,841	2,115	726	2,829	2,103	726	12	12	0

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



Table A-6. Full-time science and engineering graduate students by field, level of study, citizenship, and sex, in all institutions according to control: 1991

Page 1 of 1

Field	Total	Level of study		Citizenship		Sex		Control	
		First year	Beyond first year	U.S.	Non-U.S.	Men	Women	Public	Private
Total, all surveyed fields .....	308,669	93,430	215,239	213,354	95,315	194,125	114,544	222,106	86,563
Total, science/engineering fields .....	277,898	81,333	196,565	186,415	91,483	185,254	92,044	198,633	79,265
Engineering, total .....	71,230	22,544	48,686	37,350	33,880	61,479	9,751	52,202	19,028
Aerospace .....	3,314	1,125	2,189	2,190	1,124	3,060	254	2,609	705
Agricultural .....	825	207	618	356	469	716	109	785	40
Biomedical .....	1,921	518	1,405	1,255	686	1,423	498	1,138	785
Chemical .....	5,788	1,517	4,271	2,821	2,967	4,800	988	4,190	1,598
Civil .....	11,214	4,183	7,031	6,064	5,150	9,173	2,041	8,609	2,605
Electrical .....	19,988	6,216	13,772	10,136	9,852	11,816	2,172	14,179	5,809
Engineering science .....	1,364	312	1,052	774	590	1,182	182	653	711
Industrial .....	5,705	2,094	3,611	2,827	2,878	4,646	1,059	4,527	1,178
Mechanical .....	11,654	3,714	7,940	6,099	5,555	10,708	946	8,044	3,010
Metallurgical/materials .....	4,059	996	3,063	2,083	1,976	3,315	744	2,810	1,249
Mining .....	336	87	249	125	211	304	32	290	46
Nuclear .....	1,080	260	820	590	490	935	145	899	181
Petroleum .....	521	130	391	120	401	483	38	414	107
Engineering, n.e.c. ....	3,461	1,187	2,274	1,910	1,551	2,918	543	2,457	1,004
Sciences, total .....	206,668	58,789	147,879	149,065	57,603	123,775	82,893	146,431	60,237
Physical sciences .....	30,131	7,109	23,022	18,234	11,997	22,869	7,262	21,781	8,350
Astronomy .....	810	153	657	598	212	641	169	529	281
Chemistry .....	16,698	4,056	12,640	10,349	6,347	11,383	5,313	12,180	4,538
Physics .....	12,482	2,848	9,634	7,181	5,301	10,767	1,715	8,950	3,532
Physical sciences, n.e.c. ....	143	52	91	106	37	78	65	142	1
Earth, atmospheric, & ocean sciences .....	10,414	2,926	7,488	7,854	2,560	7,241	3,173	8,528	1,888
Atmospheric sciences .....	859	224	635	570	289	682	177	851	8
Geosciences .....	5,691	1,516	4,175	4,296	1,395	4,154	1,537	4,479	1,212
Oceanography .....	1,898	442	1,456	1,359	539	1,257	641	1,597	301
Earth, atmos., & ocean sci., n.e.c. ....	1,966	744	1,222	1,629	337	1,148	818	1,601	365
Mathematical sciences .....	14,259	4,319	9,940	8,376	5,883	10,048	4,211	11,268	2,991
Computer sciences .....	16,552	5,560	10,992	8,559	7,993	13,016	3,536	11,526	5,026
Agricultural sciences .....	9,238	2,428	6,810	6,360	2,878	6,365	2,873	8,748	490
Biological sciences .....	42,929	10,675	32,254	31,387	11,542	23,653	19,276	31,188	11,741
Anatomy .....	956	247	709	716	240	504	452	684	272
Biochemistry .....	4,967	1,037	3,930	3,245	1,722	2,925	2,042	3,381	1,586
Biology .....	9,594	2,718	6,876	7,738	1,856	5,323	4,271	6,937	2,657
Biometry/epidemiology .....	1,446	467	979	1,000	446	648	798	912	534
Biophysics .....	645	146	497	414	231	483	162	340	305
Botany .....	2,276	540	1,736	1,454	822	1,375	901	2,145	131
Cell biology .....	2,711	608	2,105	2,093	618	1,476	1,235	1,518	1,193
Ecology .....	936	197	739	786	150	541	395	826	110
Entomology/parasitology .....	1,014	230	784	679	335	720	294	947	67
Genetics .....	1,416	314	1,102	1,108	308	713	703	1,024	392
Microbiology .....	4,409	894	3,515	3,214	1,195	2,338	2,071	3,192	1,217
Nutrition .....	2,959	838	2,121	1,852	1,107	1,041	1,918	2,503	456
Pathology .....	1,166	277	889	824	342	695	471	818	348
Pharmacology .....	2,308	543	1,765	1,676	632	1,229	1,079	1,574	734
Physiology .....	2,160	592	1,568	1,525	635	1,260	870	1,388	772
Zoology .....	1,784	465	1,319	1,470	314	1,075	709	1,654	130
Biosciences, n.e.c. ....	2,182	562	1,620	1,593	589	1,277	905	1,345	837
Psychology .....	32,382	9,264	23,118	30,762	1,620	10,873	21,509	18,924	13,458
Social sciences .....	50,763	16,508	34,255	37,533	13,230	29,710	21,053	34,468	16,295
Agricultural economics .....	2,003	631	1,372	1,042	961	1,478	525	1,888	115
Anthropology .....	5,036	1,258	3,778	4,321	715	2,096	2,940	3,536	1,500
Economics (except agricultural) .....	9,730	2,869	6,861	4,988	4,742	7,068	2,662	6,299	3,431
Geography .....	2,574	832	1,742	2,159	415	1,691	883	2,404	170
History and philosophy of science .....	340	60	260	284	56	212	128	176	164
Linguistics .....	2,597	698	1,899	1,540	1,057	1,184	1,413	1,768	829
Political science .....	16,128	6,181	9,945	13,312	2,814	9,726	6,400	9,559	6,567
Sociology .....	5,846	1,510	4,336	4,549	1,297	2,742	3,104	4,363	1,483
Sociology/anthropology .....	687	179	508	568	121	313	374	492	195
Social sciences, n.e.c. ....	5,824	2,270	3,554	4,772	1,052	3,200	2,624	3,983	1,841
Total, health fields .....	30,771	12,097	18,674	28,939	3,832	8,871	21,900	23,473	7,298
Dentistry .....	889	344	545	663	226	631	258	697	192
Neurology .....	978	218	760	804	174	563	415	507	471
Nursing .....	6,492	2,425	4,067	6,240	252	486	6,006	5,118	1,374
Pharmaceutical sciences .....	2,272	605	1,667	1,272	1,000	1,340	932	1,851	421
Preventive medicine/community health .....	4,500	2,014	2,486	3,493	1,007	1,834	2,666	3,256	1,244
Speech pathology/audiology .....	6,646	2,946	3,700	6,320	326	534	6,112	5,775	871
Veterinary sciences .....	717	152	565	494	223	438	281	652	65
Clinical medicine, n.e.c. ....	1,812	689	923	1,302	310	900	712	1,046	566
Health related, n.e.c. ....	6,665	2,704	3,961	6,351	314	2,147	4,518	4,571	2,094

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table A-7. Full-time science and engineering graduate students in all institutions, by field and citizenship, and by racial/ethnic background of U.S. citizens: 1991

Page 1 of 1

Field	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/Alaskan Native	Asian/Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Total, all surveyed fields .....	308,669	8,949	858	12,584	8,327	173,666	8,970	95,315
Total, science & engineering fields .....	277,898	7,723	720	11,323	6,981	151,473	8,195	91,483
Engineering, total .....	71,230	1,151	108	3,894	1,171	28,190	2,838	33,880
Aerospace .....	3,314	41	5	112	44	1,666	322	1,124
Agricultural .....	825	2	1	27	12	302	12	489
Biomedical .....	1,921	35	2	118	30	1,023	47	666
Chemical .....	5,788	95	22	324	110	2,203	67	2,967
Civil .....	11,214	152	20	450	225	4,970	247	5,150
Electrical .....	19,988	378	26	1,562	332	8,913	925	9,852
Engineering science .....	1,364	18	2	58	11	673	14	590
Industrial .....	5,705	160	9	238	107	2,057	256	2,878
Mechanical .....	11,654	148	9	531	191	4,577	643	5,555
Metallurgical/materials .....	4,059	41	1	202	44	1,746	49	1,976
Mining .....	336	1	0	3	6	111	4	211
Nuclear .....	1,080	14	2	23	20	519	12	490
Petroleum .....	521	2	3	0	8	106	1	401
Engineering, n.e.c. ....	3,461	66	6	246	31	1,324	237	1,551
Sciences, total .....	206,668	8,572	612	7,429	5,810	123,283	5,359	57,603
Physical sciences .....	30,131	522	56	1,167	565	15,419	485	11,897
Astronomy .....	810	11	2	30	10	532	13	212
Chemistry .....	16,696	340	41	662	343	8,735	208	6,347
Physics .....	12,482	163	12	466	207	6,080	253	5,301
Physical sciences, n.e.c. ....	143	8	1	9	5	72	11	37
Earth, atmospheric, & ocean sciences .....	10,414	100	18	195	194	7,089	258	2,560
Atmospheric sciences .....	859	6	0	24	23	510	7	269
Geosciences .....	5,691	37	13	109	89	3,923	125	1,395
Oceanography .....	1,898	17	2	28	52	1,165	95	539
Earth, atmos., & ocean sci., n.e.c. ....	1,966	40	3	34	30	1,491	31	337
Mathematical sciences .....	14,259	273	12	557	225	6,756	553	5,883
Computer sciences .....	16,552	453	18	1,180	193	6,023	712	7,993
Agricultural sciences .....	9,238	115	28	192	236	5,679	110	2,878
Biological sciences .....	42,929	995	91	2,060	1,113	26,453	675	11,542
Anatomy .....	956	22	1	57	22	611	3	240
Biochemistry .....	4,967	73	12	290	72	2,765	33	1,722
Biology .....	9,594	289	24	435	405	6,332	253	1,856
Biometry/epidemiology .....	1,446	52	2	82	63	793	8	446
Biophysics .....	645	5	2	30	5	372	0	231
Botany .....	2,276	24	6	43	31	1,335	15	822
Cell biology .....	2,711	40	5	148	69	1,808	25	618
Ecology .....	936	7	5	14	22	724	14	150
Entomology/parasitology .....	1,014	16	1	32	32	584	12	335
Genetics .....	1,416	24	0	106	20	957	1	308
Microbiology .....	4,403	89	6	222	110	2,692	95	1,195
Nutrition .....	2,959	74	7	112	54	1,538	67	1,107
Pathology .....	1,166	23	2	51	12	709	27	342
Pharmacology .....	2,308	79	13	137	62	1,354	31	632
Physiology .....	2,160	84	2	161	47	1,205	26	635
Zoology .....	1,784	30	2	22	30	1,357	29	314
Biosciences, n.e.c. ....	2,162	62	1	116	57	1,319	38	589
Psychology .....	32,382	1,448	161	761	1,617	25,623	1,132	1,620
Social sciences .....	50,763	2,666	208	1,317	1,667	30,241	1,434	13,230
Agricultural economics .....	2,003	47	3	30	36	916	10	961
Anthropology .....	5,038	101	50	96	164	3,769	141	715
Economics (except agricultural) .....	9,730	166	8	282	199	4,080	233	4,742
Geography .....	2,574	53	18	56	55	1,933	46	415
History and philosophy of science .....	340	6	0	7	2	265	4	56
Linguistics .....	2,597	75	4	80	84	1,280	37	1,057
Political science .....	16,126	1,196	56	444	612	10,321	683	2,814
Sociology .....	5,848	422	40	170	226	3,585	106	1,297
Sociology/anthropology .....	687	80	1	5	19	446	15	121
Social sciences, n.e.c. ....	5,824	500	30	167	270	3,646	159	1,052
Total, health fields .....	30,771	1,226	138	1,261	1,346	22,193	775	3,832
Dentistry .....	889	26	1	61	24	517	34	226
Neurology .....	978	17	4	67	27	664	5	174
Nursing .....	6,492	318	44	206	267	5,247	158	252
Pharmaceutical sciences .....	2,272	80	2	171	50	894	75	1,000
Preventive medicine/community health .....	4,500	279	33	250	381	2,438	112	1,007
Speech pathology/audiology .....	6,646	236	31	93	233	5,572	155	326
Veterinary sciences .....	717	30	0	18	8	423	15	223
Clinical medicine, n.e.c. ....	1,612	42	5	156	47	997	55	310
Health related, n.e.c. ....	6,665	198	18	239	309	5,421	166	314

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table A-8. Full-time science and engineering graduate students in all institutions by geographic distribution and citizenship, and by racial/ethnic background of U.S. citizens: 1991**

Page 1 of 1

Geographic distribution	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/Alaskan Native	Asian/Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Total, all institutions .....	308,669	8,949	858	12,584	8,327	173,666	8,970	95,315
New England .....	23,574	401	39	990	310	12,909	1,262	7,663
Connecticut .....	4,085	74	5	176	45	2,474	44	1,267
Maine .....	592	1	1	3	1	385	17	184
Massachusetts .....	15,782	293	28	703	229	8,070	1,148	5,311
New Hampshire .....	951	4	1	23	9	641	23	250
Rhode Island .....	1,832	27	4	76	20	932	27	546
Vermont .....	532	2	0	9	6	407	3	105
Middle Atlantic .....	45,781	1,301	84	1,977	939	24,060	1,677	15,743
New Jersey .....	5,662	112	4	420	95	2,665	335	2,031
New York .....	26,121	841	44	1,057	654	13,138	1,224	9,163
Pennsylvania .....	13,998	348	36	500	190	8,257	118	4,549
East North Central .....	58,800	1,700	131	1,952	915	33,466	913	19,723
Illinois .....	18,819	550	30	864	276	9,231	172	5,696
Indiana .....	7,925	149	6	207	107	4,767	78	2,611
Michigan .....	11,244	464	28	397	214	5,973	234	3,934
Ohio .....	15,486	449	40	310	213	8,872	425	5,177
Wisconsin .....	7,328	88	27	174	105	4,623	4	2,305
West North Central .....	20,731	308	32	609	183	11,547	637	7,415
Iowa .....	4,547	75	1	50	30	2,220	183	1,988
Kansas .....	3,086	28	6	64	39	1,612	220	1,117
Minnesota .....	5,355	62	2	153	32	3,272	168	1,866
Missouri .....	4,474	113	11	109	59	2,591	33	1,558
Nebraska .....	1,661	18	3	77	12	947	18	586
North Dakota .....	757	8	5	46	9	470	3	216
South Dakota .....	851	4	4	110	2	435	12	284
South Atlantic .....	44,756	2,451	85	1,420	848	27,381	415	12,156
Delaware .....	1,078	44	1	25	5	596	21	384
District of Columbia .....	3,830	388	5	148	76	1,873	119	1,221
Florida .....	8,147	374	19	195	372	4,795	70	2,322
Georgia .....	6,239	523	10	197	116	3,816	20	1,557
Maryland .....	5,821	267	12	259	81	3,116	64	2,022
North Carolina .....	8,069	396	25	259	87	5,522	19	1,761
South Carolina .....	2,874	82	2	46	23	1,704	39	978
Virginia .....	7,396	357	11	273	77	5,092	63	1,523
West Virginia .....	1,304	20	0	18	11	867	0	388
East South Central .....	12,930	790	29	382	93	7,619	204	3,813
Alabama .....	4,056	295	7	128	34	2,224	5	1,363
Kentucky .....	2,611	63	7	57	17	1,730	73	664
Mississippi .....	2,221	211	6	99	20	1,077	27	781
Tennessee .....	4,042	221	9	98	22	2,588	99	1,005
West South Central .....	28,628	767	111	1,100	944	15,121	191	10,394
Arkansas .....	1,249	58	3	8	4	854	20	302
Louisiana .....	4,440	174	6	177	59	2,064	61	1,899
Oklahoma .....	2,581	60	60	44	42	1,375	29	971
Texas .....	20,358	475	42	871	839	10,828	81	7,222
Mountain .....	20,247	183	126	502	573	12,957	371	5,555
Arizona .....	5,308	46	40	95	192	3,030	10	1,895
Colorado .....	6,052	77	31	197	151	4,421	82	1,093
Idaho .....	840	2	2	29	6	590	2	209
Montana .....	950	2	6	18	5	731	7	181
Nevada .....	939	8	1	38	13	576	68	235
New Mexico .....	2,219	21	21	28	181	1,324	26	618
Utah .....	3,148	5	10	77	19	1,811	81	1,145
Wyoming .....	791	2	15	20	6	474	95	179
Pacific .....	51,107	1,068	221	3,646	1,674	28,586	3,279	12,633
Alaska .....	381	1	2	12	4	249	26	87
California .....	40,259	968	169	3,068	1,527	22,161	3,081	9,275
Hawaii .....	1,767	7	9	261	10	701	23	756
Oregon .....	3,315	25	10	85	37	1,811	65	1,282
Washington .....	5,385	67	31	220	96	3,664	74	1,233
Outlying areas .....	2,115	0	0	6	1,848	20	21	220

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table A-9. Part-time science and engineering graduate students by field and sex  
in all institutions according to control: 1991**

Page 1 of 1

Field	Total	Sex		Control	
		Men	Women	Public	Private
Total, all surveyed fields .....	167,022	93,260	73,762	111,584	55,438
Total, science/engineering fields .....	137,342	88,275	49,067	90,883	46,459
Engineering, total .....	43,177	37,072	6,105	27,670	15,507
Aerospace .....	727	656	71	553	174
Agricultural .....	158	142	16	158	0
Biomedical .....	312	226	86	175	137
Chemical .....	1,339	1,067	272	976	363
Civil .....	6,051	4,928	1,123	4,386	1,665
Electrical .....	15,284	13,581	1,703	8,393	6,891
Engineering science .....	790	684	106	714	76
Industrial .....	7,628	6,285	1,343	4,439	3,189
Mechanical .....	6,166	5,585	581	4,155	2,011
Metallurgical/materials .....	1,090	849	241	640	450
Mining .....	153	135	18	69	84
Nuclear .....	202	170	32	194	8
Petroleum .....	190	176	14	162	28
Engineering, n.e.c. ....	3,087	2,588	499	2,656	431
Sciences, total .....	94,165	51,203	42,962	63,213	30,952
Physical sciences .....	4,769	3,433	1,336	3,446	1,323
Astronomy .....	19	16	3	17	2
Chemistry .....	2,726	1,770	956	1,800	926
Physics .....	1,739	1,457	282	1,378	361
Physical sciences, n.e.c. ....	285	190	95	251	34
Earth, atmospheric, & ocean sciences .....	4,333	3,010	1,323	3,763	570
Atmospheric sciences .....	109	96	13	97	12
Geosciences .....	1,937	1,451	486	1,803	134
Oceanography .....	395	234	161	321	74
Earth, atmos., & ocean sci., n.e.c. ....	1,892	1,229	663	1,542	350
Mathematical sciences .....	5,733	3,658	2,075	4,339	1,394
Computer sciences .....	18,176	13,436	4,740	9,402	8,774
Agricultural sciences .....	2,237	1,522	715	2,207	30
Biological sciences .....	9,191	4,170	5,021	7,054	2,137
Anatomy .....	90	43	47	76	14
Biochemistry .....	249	149	100	172	77
Biology .....	5,892	1,878	2,014	3,093	799
Biometry/epidemiology .....	620	273	347	355	265
Biophysics .....	18	17	1	13	5
Botany .....	385	227	158	344	41
Cell biology .....	93	48	45	69	24
Ecology .....	290	148	142	206	84
Entomology/parasitology .....	157	110	47	155	2
Genetics .....	108	50	58	38	70
Microbiology .....	528	240	288	386	142
Nutrition .....	1,292	253	1,039	1,042	250
Pathology .....	351	166	185	242	109
Pharmacology .....	128	72	56	100	28
Physiology .....	169	78	91	142	27
Zoology .....	408	236	172	387	21
Biosciences, n.e.c. ....	413	182	231	234	179
Psychology .....	19,210	5,728	13,482	9,943	9,267
Social sciences .....	30,516	16,246	14,270	23,059	7,457
Agricultural economics .....	363	257	106	363	0
Anthropology .....	1,659	672	987	1,413	246
Economics (except agricultural) .....	2,979	2,085	894	2,090	889
Geography .....	1,211	769	442	1,182	29
History and philosophy of science .....	43	25	18	38	5
Linguistics .....	855	357	498	640	215
Political science .....	15,803	8,339	7,464	11,468	4,335
Sociology .....	2,468	993	1,475	2,095	373
Sociology/anthropology .....	341	148	195	170	171
Social sciences, n.e.c. ....	4,794	2,603	2,191	3,600	1,194
Total, health fields .....	29,680	4,985	24,695	20,701	8,979
Dentistry .....	141	94	47	108	33
Neurology .....	28	9	19	12	16
Nursing .....	15,797	709	15,088	11,646	4,151
Pharmaceutical sciences .....	880	485	395	435	445
Preventive medicine/community health .....	4,095	1,534	2,561	2,723	1,372
Speech pathology/audiology .....	2,673	250	2,423	2,043	630
Veterinary sciences .....	177	92	85	169	8
Clinical medicine, n.e.c. ....	452	152	300	310	142
Health related, n.e.c. ....	5,437	1,560	3,777	3,255	2,182

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table A-10. Part-time science and engineering graduate students in all institutions, by field and citizenship, and by racial/ethnic background of U.S. citizens: 1991

Page 1 of 1

Field	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/Alaskan Native	Asian/Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Total, all surveyed fields .....	167,022	7,593	590	7,617	5,080	117,965	10,422	17,755
Total, science & engineering fields .....	137,342	5,973	481	6,894	4,187	93,699	9,183	16,925
Engineering, total .....	43,177	883	81	3,309	1,008	26,830	3,627	7,439
Aerospace .....	727	3	0	84	10	468	64	98
Agricultural .....	158	2	0	1	1	106	0	48
Biomedical .....	312	3	1	20	10	201	9	88
Chemical .....	1,339	24	0	102	49	947	33	184
Civil .....	6,051	125	14	380	157	3,647	388	1,340
Electrical .....	15,284	290	14	1,542	331	8,720	1,503	2,884
Engineering science .....	790	18	2	57	15	567	14	117
Industrial .....	7,628	236	31	354	154	5,151	713	989
Mechanical .....	6,166	98	12	411	180	3,854	490	1,121
Metalurgical/materials .....	1,090	14	0	58	12	759	69	178
Mining .....	153	0	0	1	1	89	9	53
Nuclear .....	202	2	0	7	5	152	6	30
Petroleum .....	190	0	1	12	2	131	2	42
Engineering, n.e.c. ....	3,087	68	6	280	81	2,038	327	287
Sciences, total .....	94,165	5,090	400	3,585	3,179	68,869	5,558	9,486
Physical sciences .....	4,769	176	8	211	92	3,124	283	877
Astronomy .....	19	0	0	0	1	12	1	5
Chemistry .....	2,726	137	2	116	52	1,713	174	532
Physics .....	1,739	26	3	83	35	1,177	98	317
Physical sciences, n.e.c. ....	285	13	1	12	4	222	10	23
Earth, atmospheric, & ocean sciences .....	4,333	47	11	68	55	3,685	116	341
Atmospheric sciences .....	109	0	0	4	1	79	4	21
Geosciences .....	1,937	23	7	28	28	1,648	73	132
Oceanography .....	385	7	1	4	6	322	10	45
Earth, atmos., & ocean sci., n.e.c. ....	1,892	17	3	32	22	1,646	29	143
Mathematical sciences .....	5,733	245	8	308	124	3,727	579	742
Computer sciences .....	18,176	634	24	1,679	436	10,613	1,387	3,403
Agricultural sciences .....	2,237	32	4	27	43	1,747	45	339
Biological sciences .....	9,191	324	115	365	278	6,783	418	908
Anatomy .....	90	2	1	4	1	71	1	10
Biochemistry .....	249	6	1	11	11	158	4	58
Biology .....	3,892	166	17	188	148	2,879	237	257
Biometry/epidemiology .....	620	21	4	17	27	482	5	64
Biophysics .....	18	1	0	0	0	13	0	4
Botany .....	385	16	0	3	6	267	10	83
Cell biology .....	93	0	0	4	2	63	2	22
Ecology .....	290	4	0	5	4	252	9	16
Entomology/parasitology .....	157	1	0	0	5	118	4	29
Genetics .....	108	5	0	6	2	73	3	19
Microbiology .....	528	5	0	17	8	385	34	79
Nutrition .....	1,292	57	83	51	35	885	58	143
Pathology .....	351	14	1	17	6	269	17	27
Pharmacology .....	128	4	1	3	3	98	4	15
Physiology .....	169	2	0	7	2	131	7	20
Zoology .....	408	7	5	5	4	336	7	44
Biosciences, n.e.c. ....	413	13	2	27	14	323	16	18
Psychology .....	19,210	1,045	72	285	815	15,532	1,083	378
Social sciences .....	30,516	2,587	160	642	1,338	21,848	1,845	2,498
Agricultural economics .....	363	13	1	3	6	208	1	131
Anthropology .....	1,659	28	17	20	41	1,324	125	104
Economics (except agricultural) .....	2,979	114	45	110	92	1,643	331	644
Geography .....	1,211	29	2	23	27	995	44	91
History and philosophy of science .....	43	0	0	1	4	37	0	1
Linguistics .....	855	70	3	30	48	446	55	203
Political science .....	15,803	1,583	58	338	827	11,510	708	781
Sociology .....	2,468	242	14	38	97	1,876	117	284
Sociology/anthropology .....	341	32	0	5	13	244	11	30
Social sciences, n.e.c. ....	4,794	476	20	76	181	3,565	253	223
Total, health fields .....	29,880	1,620	109	723	893	24,266	1,239	830
Dentistry .....	141	0	0	10	5	107	1	18
Neurology .....	28	0	0	1	0	24	0	3
Nursing .....	15,797	790	61	318	302	13,750	428	148
Pharmaceutical sciences .....	880	71	0	41	45	467	104	152
Preventive medicine/community health .....	4,095	290	18	170	270	3,013	107	229
Speech pathology/audiology .....	2,673	143	8	28	105	2,173	158	58
Veterinary sciences .....	177	13	1	1	4	134	9	15
Clinical medicine, n.e.c. ....	452	27	1	27	8	315	16	58
Health related, n.e.c. ....	5,437	288	22	127	154	4,283	416	149

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



**Table A-11. Part-time science and engineering graduate students in all institutions by geographic distribution and citizenship, and by racial/ethnic background of U.S. citizens: 1991**

Page 1 of 1

Geographic distribution	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/Alaskan Native	Asian/Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Total, all institutions .....	167,022	7,593	590	7,617	5,080	117,965	10,422	17,755
New England .....	11,358	181	14	298	144	8,403	1,488	830
Connecticut .....	3,132	74	3	74	42	2,623	206	110
Maine .....	160	0	0	1	1	146	7	5
Massachusetts .....	7,114	102	11	209	89	4,812	1,203	688
New Hampshire .....	248	3	0	5	0	184	45	11
Rhode Island .....	552	1	0	8	7	495	27	14
Vermont .....	152	1	0	1	5	143	0	2
Middle Atlantic .....	36,228	1,690	117	1,727	916	23,849	4,025	3,904
New Jersey .....	6,198	231	85	451	132	4,026	614	659
New York .....	21,528	1,248	20	998	712	12,823	3,166	2,561
Pennsylvania .....	8,502	211	12	278	72	7,000	245	684
East North Central .....	24,958	1,280	50	897	362	18,820	1,037	2,512
Illinois .....	7,771	644	8	467	209	5,555	233	655
Indiana .....	2,186	80	2	33	15	1,840	88	128
Michigan .....	5,811	303	19	210	36	4,089	226	928
Ohio .....	6,458	192	11	139	60	4,973	485	598
Wisconsin .....	2,732	61	10	48	42	2,363	5	203
West North Central .....	10,142	171	26	209	87	7,899	580	1,170
Iowa .....	1,193	9	2	5	7	894	46	230
Kansas .....	2,392	39	8	54	35	1,663	222	371
Minnesota .....	2,043	16	6	27	8	1,841	227	118
Missouri .....	2,947	80	4	71	25	2,321	51	395
Nebraska .....	1,120	19	2	30	10	997	25	37
North Dakota .....	159	2	1	9	2	131	5	9
South Dakota .....	268	6	3	13	0	252	4	10
South Atlantic .....	27,211	1,937	60	894	734	19,800	630	3,156
Delaware .....	394	15	0	7	0	317	5	50
District of Columbia .....	4,899	461	23	208	107	2,835	380	885
Florida .....	6,453	323	18	166	440	4,595	96	815
Georgia .....	2,462	287	0	68	36	1,792	29	250
Maryland .....	4,420	344	1	160	49	3,288	80	498
North Carolina .....	2,213	165	8	57	20	1,756	5	202
South Carolina .....	1,119	68	2	19	8	876	10	136
Virginia .....	4,192	250	7	192	62	3,382	25	274
West Virginia .....	1,059	24	1	17	12	959	0	46
East South Central .....	7,341	536	19	162	55	5,789	118	662
Alabama .....	2,430	173	3	40	20	1,863	1	330
Kentucky .....	1,508	49	2	43	12	1,287	37	78
Mississippi .....	626	135	2	28	3	401	1	56
Tennessee .....	2,777	179	12	51	20	2,238	79	198
West South Central .....	17,003	863	101	868	739	11,912	461	2,059
Arkansas .....	1,063	62	3	6	5	631	334	22
Louisiana .....	1,481	223	1	51	11	1,012	41	142
Oklahoma .....	2,268	58	74	43	18	1,384	20	671
Texas .....	12,191	520	23	768	705	8,885	66	1,224
Mountain .....	9,187	122	61	209	322	7,188	294	991
Arizona .....	2,340	37	22	48	89	1,725	15	404
Colorado .....	3,298	60	9	116	83	2,639	109	282
Idaho .....	672	4	3	7	13	562	3	80
Montana .....	187	0	1	1	2	162	0	21
Nevada .....	357	8	2	5	8	277	49	8
New Mexico .....	957	8	16	11	118	728	11	65
Utah .....	1,138	5	6	19	7	942	42	117
Wyoming .....	238	0	2	2	2	153	65	14
Pacific .....	22,868	813	142	2,353	1,003	14,305	1,788	2,464
Alaska .....	309	4	1	5	1	259	11	28
California .....	19,838	771	125	2,137	977	12,044	1,631	2,153
Hawaii .....	325	5	4	107	2	162	7	38
Oregon .....	866	13	5	41	8	612	71	116
Washington .....	1,530	20	7	63	15	1,228	68	129
Outlying areas .....	726	0	0	0	718	0	1	7

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table A-12. Science and engineering graduate students by field and enrollment status,  
in historically black colleges and universities according to highest degree granted: 1991**

Page 1 of 1

Field	In all institutions			Doctorate-granting			Master's-granting		
	Total	Full-time	Part-time	Total	Full-time	Part-time	Total	Full-time	Part-time
Total, all surveyed fields .....	3,855	2,339	1,516	1,535	1,012	523	2,320	1,327	993
Total, science/engineering fields .....	3,530	2,150	1,380	1,318	879	439	2,212	1,271	941
Engineering, total .....	412	305	107	133	93	40	279	212	67
Aerospace .....	0	0	0	0	0	0	0	0	0
Agricultural .....	0	0	0	0	0	0	0	0	0
Biomedical .....	0	0	0	0	0	0	0	0	0
Chemical .....	16	15	1	8	8	0	8	7	1
Civil .....	75	32	43	58	24	34	17	8	9
Electrical .....	132	125	7	40	40	0	92	85	7
Engineering science .....	0	0	0	0	0	0	0	0	0
Industrial .....	34	24	10	0	0	0	34	24	10
Mechanical .....	94	81	13	27	21	6	67	60	7
Metallurgical/materials .....	0	0	0	0	0	0	0	0	0
Mining .....	0	0	0	0	0	0	0	0	0
Nuclear .....	0	0	0	0	0	0	0	0	0
Petroleum .....	0	0	0	0	0	0	0	0	0
Engineering, n.e.c. ....	61	28	33	0	0	0	61	28	33
Sciences, total .....	3,118	1,845	1,273	1,185	786	399	1,933	1,059	874
Physical sciences .....	353	256	97	117	87	30	236	169	67
Astronomy .....	0	0	0	0	0	0	0	0	0
Chemistry .....	206	147	59	85	62	23	121	85	36
Physics .....	141	107	34	32	25	7	109	82	27
Physical sciences, n.e.c. ....	6	2	4	0	0	0	6	2	4
Earth, atmospheric, & ocean sciences .....	62	31	31	43	25	18	19	8	13
Atmospheric sciences .....	0	0	0	0	0	0	0	0	0
Geosciences .....	5	0	5	2	0	2	3	0	3
Oceanography .....	41	25	16	41	25	16	0	0	0
Earth, atmos., & ocean sci., n.e.c. ....	16	6	10	0	0	0	16	6	10
Mathematical sciences .....	187	104	83	34	25	9	153	79	74
Computer sciences .....	429	253	176	168	90	78	261	163	98
Agricultural sciences .....	122	99	23	16	15	1	106	84	22
Biological sciences .....	469	362	107	218	183	35	251	179	72
Anatomy .....	6	6	0	6	6	0	0	0	0
Biochemistry .....	15	15	0	15	15	0	0	0	0
Biology .....	203	137	66	33	31	2	170	106	64
Biometry/epidemiology .....	0	0	0	0	0	0	0	0	0
Biophysics .....	0	0	0	0	0	0	0	0	0
Botany .....	62	38	24	33	9	24	29	29	0
Cell biology .....	0	0	0	0	0	0	0	0	0
Ecology .....	0	0	0	0	0	0	0	0	0
Entomology/parasitology .....	0	0	0	0	0	0	0	0	0
Genetics .....	24	22	2	24	22	2	0	0	0
Microbiology .....	15	15	0	15	15	0	0	0	0
Nutrition .....	37	33	4	0	0	0	37	33	4
Pathology .....	0	0	0	0	0	0	0	0	0
Pharmacology .....	14	14	0	14	14	0	0	0	0
Physiology .....	35	35	0	35	35	0	0	0	0
Zoology .....	28	21	7	28	21	7	0	0	0
Biosciences, n.e.c. ....	30	26	4	15	15	0	15	11	4
Psychology .....	487	219	248	109	61	48	358	158	200
Social sciences .....	1,029	521	508	480	300	180	549	221	328
Agricultural economics .....	43	26	17	0	0	0	43	26	17
Anthropology .....	0	0	0	0	0	0	0	0	0
Economics (except agricultural) .....	59	35	24	46	32	14	13	3	10
Geography .....	0	0	0	0	0	0	0	0	0
History and philosophy of science .....	0	0	0	0	0	0	0	0	0
Linguistics .....	142	63	79	142	63	79	0	0	0
Political science .....	320	150	170	128	106	22	192	44	148
Sociology .....	219	107	112	50	17	33	169	90	79
Sociology/anthropology .....	65	53	12	62	50	12	3	3	0
Social sciences, n.e.c. ....	181	87	94	52	32	20	129	55	74
Total, health fields .....	325	189	136	217	133	84	108	56	52
Dentistry .....	0	0	0	0	0	0	0	0	0
Neurology .....	0	0	0	0	0	0	0	0	0
Nursing .....	61	34	27	33	13	20	28	21	7
Pharmaceutical sciences .....	93	38	55	93	38	55	0	0	0
Preventive medicine/community health .....	0	0	0	0	0	0	0	0	0
Speech pathology/audiology .....	61	24	37	0	0	0	61	24	37
Veterinary sciences .....	19	11	8	0	0	0	19	11	8
Clinical medicine, n.e.c. ....	91	82	9	91	82	9	0	0	0
Health related, n.e.c. ....	0	0	0	0	0	0	0	0	0

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table A-13. Science and engineering graduate students by field, sex, and level of department, in historically black colleges and universities according to control: 1991**

Page 1 of 1

Field	Total	Control		Sex		Level of department	
		Public	Private	Men	Women	Doctorate 1/	Masters
Total, all surveyed fields	3,855	2,351	1,504	2,067	1,788	1,302	2,553
Total, science/engineering fields	3,530	2,259	1,271	1,975	1,555	1,118	2,412
Engineering, total	412	287	125	327	85	113	299
Aerospace	0	0	0	0	0	0	0
Agricultural	0	0	0	0	0	0	0
Biomedical	0	0	0	0	0	0	0
Chemical	16	10	6	10	6	2	14
Civil	75	47	28	62	13	0	75
Electrical	132	80	52	104	28	37	95
Engineering science	0	0	0	0	0	0	0
Industrial	34	34	0	20	14	0	34
Mechanical	94	55	39	80	14	74	20
Metallurgical/materials	0	0	0	0	0	0	0
Mining	0	0	0	0	0	0	0
Nuclear	0	0	0	0	0	0	0
Petroleum	0	0	0	0	0	0	0
Engineering, n.e.c.	61	61	0	51	10	0	61
Sciences, total	3,118	1,972	1,146	1,648	1,470	1,005	2,113
Physical sciences	353	182	171	239	114	144	209
Astronomy	0	0	0	0	0	0	0
Chemistry	206	100	106	125	81	83	123
Physics	141	78	65	113	28	61	80
Physical sciences, n.e.c.	6	6	0	1	5	0	6
Earth, atmospheric, & ocean sciences	62	60	2	37	25	41	21
Atmospheric sciences	0	0	0	0	0	0	0
Geosciences	5	3	2	3	2	0	5
Oceanography	41	41	0	23	18	41	0
Earth, atmos., & ocean sci., n.e.c.	16	16	0	11	5	0	16
Mathematical sciences	187	141	46	117	70	22	165
Computer sciences	429	323	106	279	150	0	429
Agricultural sciences	122	79	43	91	31	0	122
Biological sciences	469	219	250	232	237	212	257
Anatomy	6	0	6	1	5	6	0
Biochemistry	15	0	15	10	5	15	0
Biology	203	145	58	88	115	31	172
Biometry/epidemiology	0	0	0	0	0	0	0
Biophysics	0	0	0	0	0	0	0
Botany	62	29	33	35	27	29	33
Cell biology	0	0	0	0	0	0	0
Ecology	0	0	0	0	0	0	0
Entomology/parasitology	0	0	0	0	0	0	0
Genetics	24	0	24	11	13	24	0
Microbiology	15	0	15	7	8	15	0
Nutrition	37	29	8	28	9	0	37
Pathology	0	0	0	0	0	0	0
Pharmacology	14	1	13	7	7	14	0
Physiology	35	0	35	23	12	35	0
Zoology	28	0	28	7	21	28	0
Biosciences, n.e.c.	30	15	15	15	15	15	15
Psychology	467	370	97	135	332	137	330
Social sciences	1,029	598	431	518	511	449	580
Agricultural economics	43	43	0	27	16	0	43
Anthropology	0	0	0	0	0	0	0
Economics (except agricultural)	59	13	46	41	18	30	29
Geography	0	0	0	0	0	0	0
History and philosophy of science	0	0	0	0	0	0	0
Linguistics	142	0	142	56	86	142	0
Political science	320	206	114	166	154	180	140
Sociology	219	173	46	101	118	46	173
Sociology/anthropology	65	0	65	39	26	51	14
Social sciences, n.e.c.	181	183	18	88	93	0	181
Total, health fields	325	92	233	92	233	184	141
Dentistry	0	0	0	0	0	0	0
Neurology	0	0	0	0	0	0	0
Nursing	61	0	61	5	56	0	61
Pharmaceutical sciences	93	49	44	42	51	93	0
Preventive medicine/community health	0	0	0	0	0	0	0
Speech pathology/audiology	61	43	18	1	80	0	61
Veterinary sciences	19	0	19	14	5	0	19
Clinical medicine, n.e.c.	91	0	91	30	61	91	0
Health related, n.e.c.	0	0	0	0	0	0	0

1/ Includes all students enrolled in doctorate-level departments

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



**Table A-14. Science and engineering graduate students in historically black colleges and universities, by field and citizenship, and by racial/ethnic background of U.S. citizens: 1991**

Page 1 of 1

Field	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/Alaskan Native	Asian/Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Total, all surveyed fields	3,855	2,083	2	214	38	504	77	937
Total, science & engineering fields	3,530	1,936	2	198	23	386	68	917
Engineering, total	412	143	0	50	2	58	10	149
Aerospace	0	0	0	0	0	0	0	0
Agricultural	0	0	0	0	0	0	0	0
Biomedical	0	0	0	0	0	0	0	0
Chemical	16	6	0	2	0	0	0	8
Civil	75	22	0	7	1	24	0	21
Electrical	132	59	0	5	1	5	10	52
Engineering science	0	0	0	0	0	0	0	0
Industrial	34	13	0	5	0	11	0	5
Mechanical	94	28	0	23	0	12	0	31
Metallurgical/materials	0	0	0	0	0	0	0	0
Mining	0	0	0	0	0	0	0	0
Nuclear	0	0	0	0	0	0	0	0
Petroleum	0	0	0	0	0	0	0	0
Engineering, n.e.c.	61	15	0	8	0	6	0	32
Sciences, total	3,118	1,793	2	148	21	328	58	768
Physical sciences	353	192	1	46	1	29	4	80
Astronomy	0	0	0	0	0	0	0	0
Chemistry	206	122	1	19	1	8	4	51
Physics	141	65	0	26	0	21	0	29
Physical sciences, n.e.c.	6	5	0	1	0	0	0	0
Earth, atmospheric, & ocean sciences	62	26	0	0	0	19	5	12
Atmospheric sciences	0	0	0	0	0	0	0	0
Geosciences	5	4	0	0	0	1	0	0
Oceanography	41	10	0	0	0	18	1	12
Earth, atmos., & ocean sci., n.e.c.	16	12	0	0	0	0	4	0
Mathematical sciences	187	107	0	14	0	28	3	35
Computer sciences	429	189	0	45	2	26	22	145
Agricultural sciences	122	37	0	8	3	12	0	62
Biological sciences	469	279	0	17	8	32	1	132
Anatomy	6	3	0	0	0	0	0	3
Biochemistry	15	5	0	1	0	0	0	9
Biology	203	138	0	11	4	18	0	32
Biometry/epidemiology	0	0	0	0	0	0	0	0
Biophysics	0	0	0	0	0	0	0	0
Botany	62	22	0	0	1	3	0	35
Cell biology	0	0	0	0	0	0	0	0
Ecology	0	0	0	0	0	0	0	0
Entomology/parasitology	0	0	0	0	0	0	0	0
Genetics	24	12	0	1	0	4	0	7
Microbiology	15	12	0	0	0	0	0	3
Nutrition	37	11	0	0	2	4	1	19
Pathology	0	0	0	0	0	0	0	0
Pharmacology	14	11	0	0	0	0	0	3
Physiology	35	23	0	0	0	0	0	12
Zoology	28	17	0	3	0	0	0	8
Biosciences, n.e.c.	30	25	0	0	1	3	0	1
Psychology	467	333	0	8	1	77	6	42
Social sciences	1,029	630	1	10	6	105	17	260
Agricultural economics	43	15	0	1	0	2	0	25
Anthropology	0	0	0	0	0	0	0	0
Economics (except agricultural)	59	25	0	0	0	1	0	33
Geography	0	0	0	0	0	0	0	0
History and philosophy of science	0	0	0	0	0	0	0	0
Linguistics	142	99	0	0	0	0	0	43
Political science	320	186	0	2	1	69	8	54
Sociology	219	138	1	4	5	5	0	66
Sociology/anthropology	65	48	0	0	0	2	0	15
Social sciences, n.e.c.	181	119	0	3	0	26	9	24
Total, health fields	325	147	0	16	15	118	9	20
Dentistry	0	0	0	0	0	0	0	0
Neurology	0	0	0	0	0	0	0	0
Nursing	61	36	0	0	0	7	4	14
Pharmaceutical sciences	93	48	0	13	3	25	2	2
Preventive medicine/community health	0	0	0	0	0	0	0	0
Speech pathology/audiology	61	41	0	1	6	10	3	0
Veterinary sciences	19	15	0	0	0	0	0	4
Clinical medicine, n.e.c.	91	7	0	2	6	76	0	0
Health related, n.e.c.	0	0	0	0	0	0	0	0

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table A-15. Science and engineering graduate students by field and enrollment status  
in land-grant institutions according to highest degree granted: 1991

Page 1 of 1

Field	In all institutions			Doctorate-granting			Master's-granting		
	Total	Full-time	Part-time	Total	Full-time	Part-time	Total	Full-time	Part-time
Total, all surveyed fields .....	145,328	115,048	30,282	143,103	114,099	29,004	2,225	947	1,278
Total, science/engineering fields .....	132,289	108,646	25,643	130,107	105,714	24,393	2,182	932	1,250
Engineering, total .....	38,951	30,123	8,828	38,630	29,927	8,703	321	196	125
Aerospace .....	1,398	1,255	143	1,398	1,255	143	0	0	0
Agricultural .....	873	743	130	873	743	130	0	0	0
Biomedical .....	586	487	99	586	487	99	0	0	0
Chemical .....	2,982	2,699	283	2,974	2,692	282	8	7	1
Civil .....	6,618	5,266	1,352	6,601	5,258	1,343	17	8	9
Electrical .....	10,409	7,906	2,503	10,332	7,836	2,496	77	70	7
Engineering science .....	1,019	540	479	1,019	540	479	0	0	0
Industrial .....	3,562	1,883	1,679	3,528	1,859	1,669	34	24	10
Mechanical .....	6,589	5,292	1,297	6,542	5,252	1,290	47	40	7
Metallurgical/materials .....	2,245	1,951	294	2,245	1,951	294	0	0	0
Mining .....	232	178	54	232	178	54	0	0	0
Nuclear .....	898	779	119	898	779	119	0	0	0
Petroleum .....	219	193	26	219	193	26	0	0	0
Engineering, n.e.c. ....	1,321	951	370	1,183	904	279	138	47	91
Sciences, total .....	93,338	76,523	16,815	91,477	75,787	15,690	1,861	736	1,125
Physical sciences .....	13,302	12,274	1,028	13,183	12,195	988	119	79	40
Astronomy .....	340	333	7	340	333	7	0	0	0
Chemistry .....	7,259	6,682	577	7,198	6,646	552	61	36	25
Physics .....	5,668	5,228	440	5,610	5,185	425	58	43	15
Physical sciences, n.e.c. ....	35	31	4	35	31	4	0	0	0
Earth, atmospheric, & ocean sciences .....	5,678	4,432	1,246	5,659	4,426	1,233	19	8	13
Atmospheric sciences .....	625	568	57	625	568	57	0	0	0
Geosciences .....	2,798	2,257	541	2,795	2,257	538	3	0	3
Oceanography .....	1,185	1,029	156	1,185	1,029	156	0	0	0
Earth, atmos., & ocean sci., n.e.c. ....	1,070	578	492	1,054	572	482	16	8	10
Mathematical sciences .....	7,237	6,123	1,114	7,029	6,070	959	208	53	155
Computer sciences .....	6,874	5,027	1,847	6,648	4,897	1,751	226	130	96
Agricultural sciences .....	9,053	7,517	1,536	8,990	7,475	1,515	63	42	21
Biological sciences .....	20,286	17,965	2,321	20,113	17,862	2,251	173	103	70
Anatomy .....	313	277	36	313	277	36	0	0	0
Biochemistry .....	2,217	2,133	84	2,217	2,133	84	0	0	0
Biology .....	2,827	2,505	322	2,718	2,464	254	109	41	68
Biometry/epidemiology .....	389	338	53	389	336	53	0	0	0
Biophysics .....	201	201	0	201	201	0	0	0	0
Botany .....	2,046	1,796	250	2,017	1,767	250	29	29	0
Cell biology .....	1,099	1,041	58	1,099	1,041	58	0	0	0
Ecology .....	640	586	54	640	586	54	0	0	0
Entomology/parasitology .....	1,039	921	118	1,039	921	118	0	0	0
Genetics .....	650	628	24	650	626	24	0	0	0
Microbiology .....	2,105	1,880	225	2,105	1,880	225	0	0	0
Nutrition .....	2,608	2,112	496	2,579	2,083	496	29	29	0
Pathology .....	565	439	126	565	439	126	0	0	0
Pharmacology .....	929	869	60	929	869	60	0	0	0
Physiology .....	832	767	65	832	767	65	0	0	0
Zoology .....	1,378	1,119	259	1,378	1,119	259	0	0	0
Biosciences, n.e.c. ....	448	357	91	442	353	89	6	4	2
Psychology .....	8,299	6,399	1,900	7,869	6,254	1,615	430	145	285
Social sciences .....	22,609	18,786	5,823	21,986	18,608	5,378	623	178	445
Agricultural economics .....	2,120	1,806	314	2,077	1,780	297	43	26	17
Anthropology .....	1,858	1,457	399	1,856	1,457	399	0	0	0
Economics (except agricultural) .....	4,115	3,473	642	4,113	3,473	640	2	0	2
Geography .....	1,412	1,093	319	1,380	1,077	303	32	16	18
History and philosophy of science .....	141	122	19	141	122	19	0	0	0
Linguistics .....	961	860	101	961	860	101	0	0	0
Political science .....	6,373	3,697	2,676	6,010	3,649	2,361	363	48	315
Sociology .....	2,718	2,141	577	2,626	2,090	536	92	51	41
Sociology/anthropology .....	307	232	75	307	232	75	0	0	0
Social sciences, n.e.c. ....	2,608	1,905	701	2,515	1,868	647	91	37	54
Total, health fields .....	13,039	8,400	4,639	12,996	8,385	4,611	43	15	28
Dentistry .....	234	206	28	234	206	28	0	0	0
Neurology .....	273	262	11	273	262	11	0	0	0
Nursing .....	4,734	1,943	2,791	4,734	1,943	2,791	0	0	0
Pharmaceutical sciences .....	1,041	884	157	1,041	884	157	0	0	0
Preventive medicine/community health .....	2,431	1,871	760	2,431	1,871	760	0	0	0
Speech pathology/audiology .....	1,869	1,528	341	1,826	1,513	313	43	15	28
Veterinary sciences .....	794	645	149	794	645	149	0	0	0
Clinical medicine, n.e.c. ....	408	373	35	408	373	35	0	0	0
Health related, n.e.c. ....	1,255	888	367	1,255	888	367	0	0	0

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table A-16. Science and engineering graduate students in land-grant institutions, by field and citizenship, and by racial/ethnic background of U.S. citizens: 1991**

Page 1 of 1

Field	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/Alaskan Native	Asian/Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Total, all surveyed fields .....	145,328	3,828	490	5,692	4,702	84,116	3,048	43,452
Total, science & engineering fields .....	132,289	3,317	410	5,102	3,650	74,992	2,813	42,005
Engineering, total .....	38,951	642	64	2,068	611	18,044	1,217	16,305
Aerospace .....	1,398	17	2	37	14	802	12	514
Agricultural .....	873	3	1	27	11	342	12	477
Biomedical .....	586	9	2	27	13	315	16	204
Chemical .....	2,982	49	18	167	63	1,280	39	1,366
Civil .....	6,618	102	10	216	124	3,281	82	2,803
Electrical .....	10,409	195	12	823	172	4,452	250	4,505
Engineering science .....	1,019	20	1	82	12	639	14	251
Industrial .....	3,562	95	5	117	57	1,653	369	1,266
Mechanical .....	6,589	80	7	305	90	2,974	360	2,773
Metallurgical/materials .....	2,245	26	0	97	21	1,070	23	1,008
Mining .....	232	0	0	0	5	80	3	144
Nuclear .....	898	8	1	24	17	433	5	410
Petroleum .....	219	0	2	1	2	67	0	147
Engineering, n.e.c. ....	1,321	38	3	145	10	656	32	437
Sciences, total .....	93,338	2,675	346	3,034	3,039	56,948	1,596	25,700
Physical sciences .....	13,302	218	26	488	308	7,386	216	4,660
Astronomy .....	340	2	0	15	3	244	3	73
Chemistry .....	7,259	138	19	247	198	4,021	130	2,506
Physics .....	5,668	76	7	226	107	3,099	83	2,070
Physical sciences, n.e.c. ....	35	2	0	0	0	22	0	11
Earth, atmospheric, & ocean sciences .....	5,678	55	12	83	109	3,947	127	1,345
Atmospheric sciences .....	625	4	0	24	22	365	2	208
Geosciences .....	2,798	21	10	38	31	2,012	98	588
Oceanography .....	1,185	7	0	14	46	751	20	347
Earth, atmos., & ocean sci., n.e.c. ....	1,070	23	2	7	10	819	7	202
Mathematical sciences .....	7,237	138	4	243	112	3,835	63	2,842
Computer sciences .....	6,874	179	10	330	52	3,273	163	2,867
Agricultural sciences .....	9,053	122	18	177	209	5,715	127	2,685
Biological sciences .....	20,286	368	119	921	648	12,422	371	5,437
Anatomy .....	313	1	0	21	10	224	1	56
Biochemistry .....	2,217	34	4	144	40	1,216	24	755
Biology .....	2,827	87	6	172	221	1,848	74	419
Biometry/epidemiology .....	389	4	0	26	51	202	6	100
Biophysics .....	201	0	2	10	1	126	0	62
Botany .....	2,046	22	4	42	27	1,197	24	730
Cell biology .....	1,099	19	0	73	42	684	12	269
Ecology .....	640	3	4	12	12	500	15	94
Entomology/parasitology .....	1,039	19	1	31	32	627	12	317
Genetics .....	650	4	0	55	6	422	0	163
Microbiology .....	2,105	31	2	94	60	1,351	32	535
Nutrition .....	2,608	62	80	104	46	1,229	66	1,021
Pathology .....	565	13	1	15	9	353	24	150
Pharmacology .....	929	29	8	29	38	561	21	243
Physiology .....	832	13	2	65	27	497	12	216
Zoology .....	1,378	15	4	19	23	1,073	28	216
Biosciences, n.e.c. ....	448	12	1	9	3	312	20	91
Psychology .....	8,299	471	60	259	516	6,449	75	469
Social sciences .....	22,609	1,124	97	533	1,085	13,921	454	5,395
Agricultural economics .....	2,120	53	4	30	40	1,010	11	972
Anthropology .....	1,856	31	19	44	62	1,426	41	233
Economics (except agricultural) .....	4,115	78	8	92	132	2,019	44	1,742
Geography .....	1,412	19	7	31	22	1,097	10	226
History and philosophy of science .....	141	2	0	2	4	110	3	20
Linguistics .....	961	12	1	33	53	441	12	409
Political science .....	6,373	496	14	134	451	4,418	201	659
Sociology .....	2,718	164	32	70	110	1,695	61	586
Sociology/anthropology .....	307	17	0	5	8	211	0	66
Social sciences, n.e.c. ....	2,606	252	12	92	203	1,494	71	482
Total, health fields .....	13,039	511	80	590	1,052	9,124	235	1,447
Dentistry .....	234	4	0	20	5	144	1	60
Neurology .....	273	5	1	20	6	184	3	54
Nursing .....	4,734	181	29	157	184	3,975	61	147
Pharmaceutical sciences .....	1,041	54	1	49	58	459	3	417
Preventive medicine/community health .....	2,431	119	30	198	449	1,215	101	319
Speech pathology/audiology .....	1,869	88	12	55	133	1,472	13	96
Veterinary sciences .....	794	25	1	19	12	511	24	202
Clinical medicine, n.e.c. ....	408	3	3	37	13	272	4	76
Health related, n.e.c. ....	1,255	32	3	35	192	892	25	76

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table A-17. Science and engineering postdoctoral appointees in doctorate-granting institutions by field and source of support, and number of postdoctoral appointees who were non-U.S. citizens: 1991**

Page 1 of 1

Field	Total	Source of support				Non-Federal	Number of post-doctoral appointees who were not U.S. citizens
		Federal					
		Total	Fellowships	Traineeships	Research grants		
Total, all surveyed fields	31,553	21,876	2,912	2,856	16,108	9,677	15,963
Total, science/engineering fields	23,018	16,949	1,903	1,253	13,793	6,069	12,116
Engineering, total	2,237	1,488	65	25	1,398	749	1,630
Aerospace	77	55	0	0	55	22	48
Agricultural	33	18	1	0	17	15	17
Biomedical	66	53	10	8	35	13	41
Chemical	578	323	7	3	313	255	450
Civil	185	131	6	0	125	54	116
Electrical	300	202	6	3	193	98	232
Engineering science	117	93	9	0	84	24	68
Industrial	27	10	1	0	9	17	18
Mechanical	329	237	23	7	207	92	228
Metallurgical/materials	401	273	2	2	269	128	321
Mining	11	8	0	0	8	3	11
Nuclear	29	22	0	0	22	7	21
Petroleum	18	16	0	0	16	2	14
Engineering, n.e.c.	66	47	0	2	45	19	45
Sciences, total	20,781	15,461	1,838	1,228	12,395	5,320	10,486
Physical sciences	5,623	4,457	286	27	4,144	1,166	3,439
Astronomy	210	198	28	0	170	12	84
Chemistry	3,627	2,776	212	23	2,541	851	2,336
Physics	1,763	1,467	46	4	1,417	296	1,006
Physical sciences, n.e.c.	23	18	0	0	16	7	13
Earth, atmospheric, & ocean sciences	645	505	34	2	469	140	236
Atmospheric sciences	59	48	1	0	47	11	31
Geosciences	391	287	10	0	277	104	141
Oceanography	161	144	16	0	128	17	51
Earth, atmos., & ocean sci., n.e.c.	34	26	7	2	17	8	13
Mathematical sciences	206	143	27	3	113	63	114
Computer sciences	157	117	4	0	113	40	47
Agricultural sciences	574	370	29	1	340	204	247
Biological sciences	12,648	9,317	1,364	1,064	6,889	3,331	6,155
Anatomy	521	423	61	45	317	98	267
Biochemistry	2,123	1,815	213	111	1,291	508	1,150
Biology	1,398	1,139	197	48	894	259	615
Biometry/epidemiology	95	75	17	42	16	20	32
Biophysics	156	105	8	6	91	51	84
Botany	475	352	42	0	310	123	204
Cell biology	1,282	901	184	63	654	381	582
Ecology	49	37	3	0	34	12	16
Entomology/parasitology	236	164	6	2	158	72	85
Genetics	676	441	95	69	277	235	290
Microbiology	1,802	1,291	180	191	920	511	865
Nutrition	175	90	10	8	72	85	109
Pathology	1,092	686	79	154	453	406	506
Pharmacology	1,153	911	108	159	644	242	645
Physiology	1,057	792	131	123	538	265	535
Zoology	163	129	20	7	102	34	63
Biosciences, n.e.c.	195	166	10	36	120	29	107
Psychology	503	365	46	102	217	138	101
Social sciences	425	187	48	29	110	238	147
Agricultural economics	64	41	4	2	35	23	30
Anthropology	50	19	3	1	15	31	6
Economics (except agricultural)	40	1	1	0	0	39	26
Geography	25	14	3	0	11	11	7
History and philosophy of science	19	7	4	0	3	12	7
Linguistics	14	8	1	1	6	6	3
Political science	84	27	16	1	10	57	37
Sociology	99	52	14	24	14	47	25
Sociology/anthropology	1	0	0	0	0	1	0
Social sciences, n.e.c.	29	18	2	0	16	11	6
Total, health fields	8,535	4,927	1,009	1,603	2,315	3,608	3,847
Dentistry	117	68	42	11	15	49	58
Neurology	598	370	74	100	196	228	294
Nursing	28	26	11	11	4	2	0
Pharmaceutical sciences	482	341	29	10	302	141	304
Preventive medicine/community health	228	164	38	49	76	64	75
Speech pathology/audiology	41	38	7	7	24	3	12
Veterinary sciences	126	71	9	12	50	55	47
Clinical medicine, n.e.c.	6,813	3,798	784	1,382	1,632	3,015	3,036
Health related, n.e.c.	102	51	14	21	16	51	21

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table A-18. Science and engineering postdoctoral appointees and other nonfaculty doctoral research staff in doctorate-granting institutions, by field and sex: 1991

Page 1 of 1

Field	Postdoctoral appointees			Other nonfaculty doctoral research staff		
	Total	Men	Women	Total	Men	Women
Total, all surveyed fields .....	31,553	22,884	8,669	5,486	4,038	1,448
Total, science/engineering fields .....	23,018	18,990	8,028	4,563	3,484	1,079
Engineering, total .....	2,237	1,996	241	682	623	59
Aerospace .....	77	73	4	26	25	1
Agricultural .....	33	32	1	12	11	1
Biomedical .....	66	55	11	16	12	4
Chemical .....	578	486	92	61	50	11
Civil .....	185	163	22	54	51	3
Electrical .....	300	282	18	120	112	7
Engineering science .....	117	104	13	16	13	3
Industrial .....	27	25	2	20	12	8
Mechanical .....	329	307	22	139	134	5
Metallurgical/materials .....	401	358	43	146	138	10
Mining .....	11	11	0	3	3	0
Nuclear .....	29	28	3	34	33	1
Petroleum .....	18	16	2	13	9	4
Engineering, n.e.c. ....	66	58	8	22	21	1
Sciences, total .....	20,781	14,994	5,787	3,881	2,661	1,020
Physical sciences .....	5,823	4,792	831	1,022	902	120
Astronomy .....	210	176	34	68	61	5
Chemistry .....	3,827	2,989	838	507	414	93
Physics .....	1,763	1,608	155	448	426	22
Physical sciences, n.e.c. ....	23	19	4	1	1	0
Earth, atmospheric, & ocean sciences .....	845	533	112	303	245	58
Atmospheric sciences .....	59	49	10	26	25	1
Geosciences .....	391	333	58	129	101	28
Oceanography .....	161	127	34	141	114	27
Earth, atmos., & ocean sci., n.e.c. ....	34	24	10	7	5	2
Mathematical sciences .....	206	177	29	77	63	14
Computer sciences .....	157	130	27	49	37	12
Agricultural sciences .....	574	440	134	208	156	52
Biological sciences .....	12,648	8,389	4,259	1,850	1,234	616
Anatomy .....	521	342	179	42	30	12
Biochemistry .....	2,123	1,405	718	351	224	127
Biology .....	1,398	939	459	251	176	75
Biometry/epidemiology .....	95	62	33	31	17	14
Biophysics .....	158	112	44	36	27	9
Botany .....	475	323	152	122	92	30
Cell biology .....	1,282	818	464	147	105	42
Ecology .....	49	33	16	26	16	10
Entomology/parasitology .....	236	186	50	78	64	14
Genetics .....	678	426	250	70	37	33
Microbiology .....	1,802	1,162	640	150	93	57
Nutrition .....	175	118	57	86	59	27
Pathology .....	1,092	729	363	102	58	44
Pharmacology .....	1,153	775	378	150	101	49
Physiology .....	1,057	723	334	145	100	45
Zoology .....	183	103	60	40	18	24
Biosciences, n.e.c. ....	195	133	62	23	19	4
Psychology .....	503	267	236	193	111	82
Social sciences .....	425	266	159	179	113	66
Agricultural economics .....	64	47	17	13	9	4
Anthropology .....	50	27	23	60	42	18
Economics (except agricultural) .....	40	37	3	8	8	0
Geography .....	25	20	5	4	4	0
History and philosophy of science .....	19	10	9	1	1	0
Linguistics .....	14	9	5	49	25	24
Political science .....	84	49	35	3	2	1
Sociology .....	99	54	45	26	21	5
Sociology/anthropology .....	1	0	1	0	0	0
Social sciences, n.e.c. ....	29	13	16	17	3	14
Total, health fields .....	8,535	5,894	2,641	923	554	369
Dentistry .....	117	87	30	18	11	5
Neurology .....	598	404	194	77	50	27
Nursing .....	28	3	25	2	0	2
Pharmaceutical sciences .....	482	331	151	63	55	28
Preventive medicine/community health .....	228	139	89	44	21	23
Speech pathology/audiology .....	41	19	22	7	3	4
Veterinary sciences .....	126	77	49	30	20	10
Clinical medicine, n.e.c. ....	6,813	4,772	2,041	640	387	253
Health related, n.e.c. ....	102	62	40	24	7	17

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



Table B-1. Total enrollment in all institutions of higher education, by level and field: 1975-91

Page 1 of 1

Year	Total	Graduate enrollment						Under-graduate enrollment	First-professional enrollment
		Total, all fields	NSF fields	Sciences	Engineering	Health fields	Non-S&E		
Total, all U. S. institutions									
1975 .....	11,280,719	1,423,277	329,202	235,055	68,360	25,787	1,094,075	9,623,484	243,958
1976 .....	11,121,426	1,258,302	334,383	239,021	66,750	28,612	923,919	9,617,211	245,913
1977 .....	11,415,020	1,264,082	345,962	243,229	68,782	33,951	918,120	9,898,039	252,899
1978 1/ ..	11,391,950	1,265,961	344,220	239,508	68,236	36,476	921,741	9,867,493	258,496
1979 .....	11,707,126	1,261,093	358,844	248,209	71,807	38,828	902,249	10,181,040	264,993
1980 .....	12,234,644	1,293,697	368,390	252,218	74,465	41,707	925,307	10,661,150	279,797
1981 .....	12,517,753	1,349,572	376,533	253,247	79,758	43,528	973,039	10,891,663	276,518
1982 .....	12,588,520	1,329,644	383,549	255,867	83,898	43,784	946,095	10,978,407	280,469
1983 .....	12,633,930	1,347,973	392,376	257,204	91,111	44,061	955,597	11,005,261	280,696
1984 1/ ..	12,400,392	1,353,554	396,449	257,975	92,780	45,694	957,105	10,766,018	280,820
1985 1/ ..	12,411,945	1,384,862	405,432	263,394	96,160	45,878	979,430	10,749,752	277,331
1986 1/ ..	12,670,109	1,444,369	416,442	266,907	102,140	47,395	1,027,927	10,952,167	273,573
1987 1/ ..	12,923,451	1,461,376	421,441	269,873	103,889	47,679	1,039,935	11,191,431	270,644
1988 .....	13,218,786	1,481,509	425,752	273,682	103,159	48,931	1,055,757	11,467,209	270,068
1989 .....	13,701,518	1,531,046	434,861	280,372	104,319	50,170	1,096,185	11,893,125	277,347
1990 .....	13,871,725	1,583,389	444,346	287,969	107,329	49,048	1,139,043	12,011,657	276,679
1991 2/ ..	14,317,300	1,589,600	475,691	300,833	114,407	60,451	1,113,909	12,453,000	274,700
Subtotal, 50 States and D.C.									
1975 .....	11,184,859	1,418,616	327,926	234,160	68,306	25,440	1,090,690	9,523,976	242,267
1976 .....	11,012,137	1,253,240	333,119	238,092	66,708	28,319	920,121	9,514,605	244,292
1977 .....	11,285,787	1,258,157	344,445	242,147	68,664	33,634	913,712	9,776,273	251,357
1978 1/ ..	11,260,092	1,260,998	342,788	238,453	68,167	36,168	918,210	9,742,190	256,904
1979 .....	11,569,899	1,255,676	357,400	247,083	71,757	38,560	898,276	10,050,819	283,404
1980 .....	12,096,895	1,287,497	366,508	250,720	74,417	41,371	920,989	10,531,631	277,767
1981 .....	12,371,672	1,342,555	374,666	251,733	79,703	43,230	967,889	10,754,522	274,595
1982 .....	12,425,780	1,322,293	381,514	254,278	83,837	43,999	940,779	10,825,062	278,425
1983 .....	12,464,661	1,340,137	390,081	255,497	91,049	43,535	950,056	10,845,995	278,529
1984 1/ ..	12,241,940	1,345,271	394,013	256,119	92,695	45,199	951,258	10,618,071	278,598
1985 1/ ..	12,247,055	1,376,181	402,880	261,496	96,058	45,326	973,301	10,596,674	274,200
1986 1/ ..	12,504,489	1,435,288	413,922	265,015	102,030	46,877	1,021,366	10,798,800	270,401
1987 1/ ..	12,766,642	1,452,075	419,200	268,267	103,811	47,122	1,032,875	11,046,235	268,332
1988 .....	13,055,337	1,471,680	423,521	272,229	103,038	48,254	1,048,159	11,316,548	267,109
1989 .....	13,538,563	1,521,581	432,554	278,853	104,211	49,490	1,089,027	11,742,531	274,451
1990 .....	13,710,150	1,573,637	441,931	286,432	107,220	48,279	1,131,706	11,862,910	273,603
1991 2/ ..	14,157,000	1,579,600	472,850	298,981	114,239	59,630	1,106,750	12,306,000	271,400
Outlying areas									
1975 .....	105,860	4,661	1,276	875	54	347	3,385	99,508	1,691
1976 .....	109,289	5,062	1,264	929	42	293	3,798	102,606	1,621
1977 .....	129,233	5,925	1,517	1,082	118	317	4,408	121,766	1,542
1978 1/ ..	131,858	4,963	1,432	1,055	69	308	3,531	125,303	1,592
1979 .....	137,227	5,417	1,444	1,126	50	268	3,973	130,221	1,589
1980 .....	137,749	6,200	1,682	1,498	48	336	4,318	129,519	2,030
1981 .....	146,081	7,017	1,867	1,514	55	298	5,150	137,141	1,923
1982 .....	162,740	7,351	2,035	1,589	61	385	5,316	153,345	2,044
1983 .....	169,269	7,836	2,295	1,707	62	526	5,541	159,266	2,167
1984 1/ ..	158,452	8,283	2,436	1,856	85	495	5,847	147,947	2,222
1985 1/ ..	164,890	8,681	2,552	1,898	102	552	6,129	153,078	3,131
1986 1/ ..	165,620	9,081	2,520	1,892	110	518	6,561	153,367	3,172
1987 1/ ..	156,809	9,301	2,241	1,606	78	557	7,060	145,196	2,312
1988 .....	163,449	9,829	2,231	1,433	121	677	7,598	150,661	2,959
1989 .....	162,955	9,465	2,307	1,519	108	680	7,158	150,594	2,896
1990 .....	161,575	9,752	2,415	1,537	109	769	7,337	148,747	3,076
1991 2/ ..	160,300	10,000	2,841	1,852	168	821	7,520	147,000	3,300

1/ Graduate science and engineering enrollment data for 1978 and for 1984 through 1987 include estimates for master's-granting institutions.

2/ National Center for Educational Statistics data for 1991 represent preliminary estimates based on a sample of 665 institutions.

KEY: S&amp;E = Science and engineering

SOURCES: U. S. Department of Education/NCES, Opening Fall Enrollment and National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table B-2. Science and engineering graduate students in all institutions,  
by enrollment status and field: 1975-91

Page 1 of 2

Year	Total, all surveyed fields	Sciences								
		Sciences, total	Physical sciences	Earth, atmos- pheric, and ocean sciences	Mathe- matical sciences	Computer sciences	Agri- cultural sciences	Biological sciences	Psychology	Social sciences
Total enrollment										
1975 .....	329,202	235,055	26,310	12,289	16,918	8,415	10,659	46,530	36,191	77,743
1976 .....	334,383	239,021	26,631	13,034	17,092	8,627	11,239	47,845	37,458	77,095
1977 .....	345,962	243,229	26,855	13,658	16,069	9,108	11,606	49,337	38,617	77,979
1978 1/ .....	345,187	239,966	26,379	13,484	15,077	9,925	11,753	48,600	38,188	76,560
1979 .....	358,844	248,209	26,695	13,854	15,051	11,690	12,160	48,329	39,777	80,653
1980 .....	368,390	252,218	26,945	14,208	15,350	13,578	12,357	47,726	40,617	81,437
1981 .....	376,533	253,247	27,369	14,422	15,906	16,437	12,206	46,794	40,674	79,439
1982 .....	383,549	255,867	28,187	15,174	17,178	19,812	12,422	46,106	40,082	76,906
1983 .....	392,376	257,204	29,456	15,590	17,380	23,616	12,396	45,771	40,912	72,083
1984 2/ .....	396,449	257,975	30,056	15,655	17,459	25,810	12,181	45,892	40,937	69,985
1985 2/ .....	405,432	263,394	30,981	15,591	17,580	29,844	11,499	46,276	41,173	70,450
1986 2/ .....	416,442	266,907	32,248	15,210	17,867	31,397	11,433	46,912	41,417	70,323
1987 2/ .....	421,441	269,873	32,730	14,522	18,524	32,137	11,095	47,138	42,327	71,400
1988 .....	425,752	273,662	32,962	14,040	19,103	32,554	11,094	47,989	44,154	71,766
1989 .....	434,861	280,372	33,619	13,849	19,338	32,598	11,126	49,257	46,046	74,539
1990 .....	444,346	287,969	33,621	14,105	19,782	34,373	11,277	49,483	48,243	77,085
1991 .....	475,691	300,833	34,900	14,747	19,992	34,728	11,475	52,120	51,592	81,279
Full-time										
1975 .....	220,123	164,793	21,916	9,677	10,695	4,473	8,839	37,000	24,105	48,088
1976 .....	223,855	168,157	22,252	10,219	10,952	4,748	9,400	38,002	25,643	46,941
1977 .....	227,187	169,448	22,505	10,556	10,365	4,604	9,653	38,502	25,703	47,560
1978 1/ .....	225,072	165,537	22,158	10,511	9,804	4,926	9,598	38,122	24,963	45,455
1979 .....	232,376	169,378	22,535	10,724	9,667	5,853	9,879	38,106	25,859	46,755
1980 .....	238,868	172,073	22,918	10,969	9,902	6,587	10,070	37,812	26,678	47,137
1981 .....	242,777	172,586	23,308	11,038	10,154	7,445	10,165	37,426	26,715	46,335
1982 .....	245,378	172,360	24,038	11,436	10,814	9,171	9,971	36,829	25,812	44,289
1983 .....	252,846	176,007	25,205	12,068	10,957	10,687	9,926	36,862	26,693	43,609
1984 2/ .....	254,735	176,433	25,852	11,837	11,311	11,587	9,851	37,234	26,102	42,659
1985 2/ .....	258,241	179,126	26,669	11,458	11,818	14,101	9,191	37,141	25,751	42,997
1986 2/ .....	267,075	183,418	27,764	11,347	12,390	15,310	9,314	37,917	26,469	42,907
1987 2/ .....	271,772	186,023	28,414	10,543	13,044	15,572	9,063	38,529	27,308	43,550
1988 .....	276,225	188,593	28,574	10,299	13,514	15,393	9,072	39,522	28,368	43,853
1989 .....	283,849	193,532	29,207	10,143	13,695	15,797	9,001	40,680	29,608	45,401
1990 .....	288,981	197,825	29,042	10,273	13,834	16,859	9,052	40,420	30,694	47,651
1991 .....	308,669	206,668	30,131	10,414	14,259	16,552	9,238	42,929	32,382	50,783
Part-time										
1975 .....	109,079	70,262	4,394	2,612	6,223	3,942	1,820	9,530	12,086	29,655
1976 .....	110,528	70,864	4,379	2,815	6,140	3,879	1,839	9,843	11,815	30,154
1977 .....	118,775	73,781	4,350	3,102	5,704	4,504	1,953	10,835	12,914	30,419
1978 1/ .....	120,115	74,429	4,221	2,973	5,273	4,992	2,155	10,478	12,225	31,105
1979 .....	126,468	78,831	4,180	3,130	5,384	5,837	2,281	10,223	13,918	33,898
1980 .....	129,522	80,145	4,027	3,239	5,448	6,991	2,287	9,914	13,939	34,300
1981 .....	133,756	80,661	4,061	3,384	5,752	8,992	2,041	9,368	13,959	33,104
1982 .....	138,171	83,507	4,149	3,738	6,364	10,841	2,451	9,277	14,270	32,617
1983 .....	139,530	81,197	4,251	3,522	6,423	12,929	2,470	9,909	14,219	28,474
1984 2/ .....	141,714	81,542	4,204	3,818	6,148	14,223	2,330	8,658	14,835	27,326
1985 2/ .....	147,191	84,268	4,312	4,133	5,762	15,743	2,308	9,135	15,422	27,453
1986 2/ .....	149,367	83,489	4,484	3,863	5,577	16,087	2,119	8,995	14,948	27,416
1987 2/ .....	149,669	83,850	4,316	3,979	5,480	16,565	2,032	8,609	15,019	27,850
1988 .....	149,527	85,069	4,388	3,741	5,589	17,161	2,022	8,467	15,788	27,913
1989 .....	151,012	86,840	4,412	3,706	5,643	16,801	2,125	8,577	16,438	29,138
1990 .....	155,365	90,144	4,579	3,832	5,946	17,514	2,225	9,063	17,549	29,434
1991 .....	167,022	94,165	4,769	4,333	5,733	18,176	2,237	9,191	19,210	30,516

See explanatory information, if any, and SOURCE(S) at end of table.

**Table B-2. Science and engineering graduate students in all institutions, by enrollment status and field: 1975-91**

Page 2 of 2

Year	Engineering									Health fields
	Engi- neering, total	Aerospace engi- neering	Chemical engi- neering	Civil engi- neering	Electrical engi- neering	Industrial engi- neering	Mechanical engi- neering	Metallur- gical & materials engi- neering	Other engi- neering	
Total enrollment										
1975 .....	68,360	1,670	5,336	12,560	16,320	11,663	8,601	2,352	9,858	25,787
1976 .....	66,750	1,477	5,581	11,995	15,926	10,687	8,313	2,375	10,396	28,612
1977 .....	68,782	1,518	5,580	12,352	17,406	10,438	8,722	2,559	10,207	33,951
1978 1/ .....	68,661	1,460	5,751	12,771	17,365	9,569	8,704	2,569	10,472	36,560
1979 .....	71,807	1,481	6,029	12,836	17,715	10,714	9,251	2,756	11,025	38,828
1980 .....	74,465	1,737	6,518	13,111	19,132	9,737	9,888	2,910	11,432	41,707
1981 .....	79,758	1,883	7,017	14,103	20,113	9,797	10,618	3,125	13,102	43,528
1982 .....	83,898	1,941	7,775	14,146	21,927	9,641	11,467	3,124	13,877	43,704
1983 .....	91,111	2,305	8,300	14,921	25,116	9,373	12,911	3,447	14,738	44,061
1984 2/ .....	92,780	2,340	8,117	15,203	26,198	9,535	13,855	3,657	13,875	45,694
1985 2/ .....	96,160	2,538	7,932	14,916	28,026	10,841	14,157	3,943	13,607	45,878
1986 2/ .....	102,140	2,804	7,759	14,987	29,799	11,888	15,713	4,208	14,982	47,395
1987 2/ .....	103,889	3,015	7,844	14,718	31,214	12,457	16,278	4,368	13,997	47,679
1988 .....	103,159	3,223	7,360	14,822	31,837	11,731	16,207	4,335	13,644	48,931
1989 .....	104,319	3,454	7,125	14,919	33,055	11,458	16,239	4,589	13,480	50,170
1990 .....	107,329	3,866	7,327	15,454	33,583	11,611	16,455	4,921	14,112	49,048
1991 .....	114,407	4,041	7,838	17,265	35,272	13,333	17,820	5,149	13,689	60,451
Full-time										
1975 .....	37,813	1,245	3,743	7,363	8,278	4,152	4,931	1,787	6,314	17,517
1976 .....	36,950	1,165	4,014	7,025	8,147	3,578	4,919	1,860	6,242	18,748
1977 .....	37,225	1,187	4,174	7,111	8,528	3,343	4,883	1,951	6,048	20,514
1978 1/ .....	37,913	1,138	4,258	7,673	8,512	3,256	4,952	1,973	6,151	21,622
1979 .....	40,017	1,152	4,555	7,637	9,039	3,743	5,428	2,135	6,328	22,981
1980 .....	42,720	1,327	4,863	7,964	9,963	3,764	5,841	2,254	6,744	24,075
1981 .....	45,851	1,483	5,382	8,805	10,450	3,639	6,422	2,454	7,216	24,340
1982 .....	49,865	1,522	6,084	9,398	11,533	3,827	7,267	2,478	7,756	23,153
1983 .....	53,931	1,840	6,489	9,807	13,203	3,322	8,330	2,704	8,236	22,908
1984 2/ .....	55,157	1,854	6,348	10,089	13,857	3,433	8,698	2,872	8,006	23,145
1985 2/ .....	55,938	1,994	6,123	9,760	14,752	3,517	8,875	3,093	7,824	23,177
1986 2/ .....	60,227	2,154	6,166	9,982	16,222	3,875	9,789	3,370	8,669	23,430
1987 2/ .....	61,885	2,372	6,264	9,651	17,040	4,233	10,164	3,436	8,725	23,864
1988 .....	63,187	2,533	5,958	9,957	17,653	4,398	10,426	3,464	8,798	24,445
1989 .....	64,546	2,772	5,788	9,974	18,396	4,761	10,464	3,715	8,676	25,771
1990 .....	65,692	3,010	5,853	10,074	18,567	4,863	10,662	3,922	8,741	25,464
1991 .....	71,230	3,314	6,309	11,214	19,988	5,705	11,654	4,059	8,987	30,771
Part-time										
1975 .....	30,547	425	1,593	5,197	8,042	7,511	3,670	565	3,544	8,270
1976 .....	29,800	312	1,567	4,970	7,779	7,109	3,394	515	4,154	9,864
1977 .....	31,557	331	1,406	5,241	8,878	7,095	3,839	608	4,159	13,437
1978 1/ .....	30,748	322	1,493	5,098	8,883	6,313	3,752	596	4,321	14,938
1979 .....	31,790	329	1,474	5,199	8,676	6,971	3,823	621	4,697	15,847
1980 .....	31,745	410	1,655	5,147	9,169	5,973	4,047	656	4,688	17,632
1981 .....	33,907	400	1,635	5,298	9,663	6,158	4,196	671	5,886	19,168
1982 .....	34,033	419	1,691	4,748	10,394	5,814	4,200	646	6,121	20,631
1983 .....	37,180	485	1,811	5,114	11,913	6,051	4,581	743	6,502	21,153
1984 2/ .....	37,623	486	1,769	5,114	12,341	6,102	5,157	785	5,869	22,549
1985 2/ .....	40,222	544	1,809	5,156	13,274	7,324	5,282	850	5,983	22,701
1986 2/ .....	41,913	650	1,593	5,005	13,577	8,013	5,924	838	6,313	23,965
1987 2/ .....	42,004	643	1,560	5,067	14,174	8,224	6,114	930	5,272	23,815
1988 .....	39,972	690	1,402	4,865	14,184	7,333	5,781	871	4,846	24,486
1989 .....	39,773	682	1,337	4,945	14,659	6,697	5,775	874	4,804	24,399
1990 .....	41,637	856	1,474	5,380	15,016	6,748	5,793	999	5,371	23,584
1991 .....	43,177	727	1,529	6,051	15,284	7,628	6,166	1,090	4,702	29,680

1/ Master's-granting institutions were not surveyed in 1978; totals include estimates based on 1977 and 1979 data.

2/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



Table B-3. Science and engineering graduate students in all institutions, by sex and field: 1975-91

Page 1 of 2

Year	Total, all surveyed fields	Sciences								
		Sciences, total	Physical sciences	Earth, atmospheric, and ocean sciences	Mathematical sciences	Computer sciences	Agricultural sciences	Biological sciences	Psychology	Social sciences
Total enrollment										
1975 .....	329,202	235,055	26,310	12,289	16,918	8,415	10,659	46,530	36,191	77,743
1976 .....	334,383	239,021	26,631	13,034	17,092	8,627	11,239	47,845	37,458	77,095
1977 .....	345,962	243,229	26,855	13,658	16,069	9,108	11,606	49,337	38,617	77,979
1978 1/ .....	345,187	239,966	26,379	13,484	15,077	9,925	11,753	48,600	38,188	76,560
1979 .....	358,844	248,209	26,695	13,854	15,051	11,690	12,160	48,329	39,777	80,653
1980 .....	368,390	252,218	26,945	14,208	15,350	13,578	12,357	47,726	40,617	81,437
1981 .....	376,533	253,247	27,369	14,422	15,906	16,437	12,206	46,794	40,674	79,439
1982 .....	383,549	255,867	28,187	15,174	17,178	19,812	12,422	46,106	40,082	78,906
1983 .....	392,376	257,204	29,456	15,590	17,380	23,616	12,396	45,771	40,912	72,083
1984 2/ .....	396,449	257,975	30,056	15,855	17,459	25,810	12,181	45,892	40,937	69,985
1985 2/ .....	405,432	263,394	30,981	15,591	17,580	29,844	11,499	46,276	41,173	70,450
1986 2/ .....	416,442	266,907	32,248	15,210	17,967	31,397	11,433	46,912	41,417	70,323
1987 2/ .....	421,441	269,873	32,730	14,522	18,524	32,137	11,095	47,138	42,327	71,400
1988 .....	425,752	273,662	32,962	14,040	19,103	32,554	11,094	47,989	44,154	71,766
1989 .....	434,861	280,372	33,619	13,849	19,338	32,598	11,126	49,257	48,046	74,539
1990 .....	444,346	287,969	33,621	14,105	19,782	34,373	11,277	49,483	48,243	77,085
1991 .....	475,691	300,833	34,900	14,747	19,992	34,728	11,475	52,120	51,592	81,279
Men										
1975 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977 .....	245,349	188,939	22,616	11,307	11,944	7,549	9,516	32,581	20,518	52,708
1978 1/ .....	238,381	162,969	22,175	10,910	11,129	8,090	9,438	31,330	19,445	50,451
1979 .....	241,785	184,576	22,202	10,925	11,022	9,367	9,533	30,385	19,426	51,716
1980 .....	244,053	163,992	22,347	10,940	11,265	10,491	9,528	29,372	19,028	51,021
1981 .....	244,439	160,837	22,355	10,945	11,414	12,228	9,453	28,074	17,900	48,468
1982 .....	247,088	160,807	22,768	11,393	12,100	14,366	9,396	26,877	16,977	46,930
1983 .....	252,066	160,066	23,578	11,632	12,176	16,968	9,263	26,378	16,649	43,422
1984 2/ .....	253,571	160,387	23,898	11,726	12,285	18,905	9,040	26,329	16,181	42,003
1985 2/ .....	259,307	163,250	24,474	11,606	12,215	22,345	8,511	26,311	15,738	42,050
1986 2/ .....	265,674	164,643	25,385	11,215	12,492	23,613	8,470	26,391	15,432	41,645
1987 2/ .....	268,598	165,586	25,614	10,708	12,929	24,191	8,125	26,515	15,530	41,974
1988 .....	266,964	165,136	25,465	10,170	13,329	24,350	8,000	26,560	15,563	41,899
1989 .....	270,422	167,367	25,817	9,924	13,336	24,663	7,986	26,879	15,832	42,930
1990 .....	274,513	169,479	25,690	9,983	13,573	26,206	7,930	26,689	15,864	43,544
1991 .....	287,385	174,978	26,302	10,251	13,708	26,452	7,887	27,823	16,601	45,956
Women										
1975 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977 .....	100,613	74,290	4,039	2,351	4,125	1,559	2,090	16,756	18,099	25,271
1978 1/ .....	106,806	76,997	4,203	2,574	3,948	1,835	2,315	17,270	18,743	26,109
1979 .....	117,059	83,633	4,493	2,929	4,029	2,323	2,627	17,944	20,351	28,937
1980 .....	124,337	88,226	4,598	3,268	4,085	3,087	2,829	18,354	21,589	30,416
1981 .....	132,094	92,410	5,014	3,477	4,492	4,209	2,753	18,720	22,774	30,971
1982 .....	136,461	95,060	5,419	3,781	5,078	5,446	3,026	19,229	23,105	29,976
1983 .....	140,310	97,138	5,878	3,958	5,204	6,648	3,133	19,393	24,263	28,681
1984 2/ .....	142,878	97,608	6,158	3,929	5,174	6,805	3,141	19,563	24,756	27,982
1985 2/ .....	146,125	100,144	6,507	3,985	5,365	7,499	2,888	19,965	25,435	28,400
1986 2/ .....	150,768	102,264	6,863	3,995	5,475	7,784	2,963	20,521	25,985	28,678
1987 2/ .....	152,843	104,287	7,116	3,814	5,595	7,946	2,970	20,623	26,797	29,426
1988 .....	158,788	108,526	7,497	3,870	5,774	8,204	3,094	21,429	28,591	30,087
1989 .....	164,439	113,005	7,802	3,925	6,002	7,935	3,140	22,378	30,214	31,609
1990 .....	169,833	118,490	7,931	4,122	6,209	8,167	3,347	22,794	32,379	33,541
1991 .....	186,306	125,855	8,598	4,496	6,286	8,276	3,588	24,297	34,991	35,323

See explanatory information, if any, and SOURCE(S) at end of table.

BEST COPY AVAILABLE

Table B-3. Science and engineering graduate students in all institutions, by sex and field: 1975-91

Page 2 of 2

Year	Engineering									Health fields
	Engineering, total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical & materials engineering	Other engineering	
Total enrollment										
1975 .....	68,360	1,870	5,336	12,560	16,320	11,663	8,601	2,352	9,858	25,787
1976 .....	68,750	1,477	5,581	11,995	15,926	10,687	8,313	2,375	10,396	28,812
1977 .....	68,782	1,518	5,580	12,352	17,406	10,438	8,722	2,558	10,207	33,951
1978 1/ .....	68,661	1,460	5,751	12,771	17,365	9,569	8,704	2,569	10,472	36,580
1979 .....	71,807	1,461	6,029	12,836	17,715	10,714	9,251	2,756	11,025	38,828
1980 .....	74,465	1,737	6,518	13,111	19,132	9,737	9,888	2,910	11,432	41,707
1981 .....	79,758	1,883	7,017	14,103	20,113	9,797	10,618	3,125	13,102	43,528
1982 .....	83,898	1,941	7,775	14,146	21,927	9,641	11,467	3,124	13,877	43,784
1983 .....	91,111	2,305	8,300	14,921	25,116	9,373	12,911	3,447	14,738	44,061
1984 2/ .....	92,780	2,340	8,117	15,203	26,198	9,535	13,855	3,657	13,875	45,694
1985 2/ .....	96,160	2,538	7,932	14,916	28,028	10,841	14,157	3,943	13,807	45,878
1986 2/ .....	102,140	2,804	7,759	14,987	29,799	11,888	15,713	4,208	14,982	47,395
1987 2/ .....	103,889	3,015	7,844	14,718	31,214	12,457	18,278	4,366	13,997	47,679
1988 .....	103,159	3,223	7,360	14,822	31,837	11,731	16,207	4,335	13,644	48,931
1989 .....	104,319	3,454	7,125	14,919	33,055	11,458	16,239	4,589	13,480	50,170
1990 .....	107,329	3,866	7,327	15,454	33,583	11,611	16,455	4,921	14,112	49,048
1991 .....	114,407	4,041	7,838	17,265	35,272	13,333	17,820	5,149	13,689	60,451
Men										
1975 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977 .....	65,077	1,485	5,192	11,522	16,896	9,683	8,449	2,376	9,874	11,333
1978 1/ .....	64,009	1,421	5,255	11,598	16,564	8,685	8,358	2,348	9,782	11,403
1979 .....	65,922	1,432	5,384	11,513	16,782	9,463	8,782	2,488	10,098	11,287
1980 .....	68,125	1,663	5,798	11,745	18,149	8,387	9,354	2,607	10,422	11,938
1981 .....	72,004	1,816	6,187	12,527	18,837	8,253	9,987	2,735	11,662	11,598
1982 .....	75,105	1,831	6,832	12,394	20,376	8,010	10,748	2,704	12,210	11,176
1983 .....	81,320	2,182	7,212	13,061	23,071	7,829	12,106	2,999	12,860	10,680
1984 2/ .....	82,439	2,208	7,085	13,175	24,010	7,844	12,899	3,189	12,029	10,765
1985 2/ .....	85,000	2,375	6,882	12,767	25,617	8,938	13,146	3,340	11,955	11,057
1986 2/ .....	89,675	2,604	6,672	12,836	26,909	9,664	14,554	3,533	12,903	11,356
1987 2/ .....	90,927	2,791	6,650	12,605	28,138	10,157	14,995	3,637	11,854	12,085
1988 .....	89,952	2,996	6,236	12,525	28,582	9,541	14,792	3,579	11,701	11,876
1989 .....	90,644	3,214	6,068	12,481	29,564	9,270	14,836	3,760	11,431	12,411
1990 .....	92,625	3,579	6,152	12,770	29,885	9,395	15,029	4,026	11,789	12,409
1991 .....	98,551	3,716	6,526	14,101	31,397	10,931	16,293	4,164	11,423	13,856
Women										
1975 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977 .....	3,705	33	388	830	710	755	273	183	533	22,618
1978 1/ .....	4,852	39	496	1,173	801	884	346	223	690	25,157
1979 .....	5,885	49	645	1,323	933	1,251	469	288	927	27,541
1980 .....	6,340	74	720	1,368	983	1,350	534	303	1,010	29,771
1981 .....	7,754	67	830	1,578	1,276	1,544	631	390	1,440	31,930
1982 .....	8,793	110	943	1,752	1,551	1,631	719	420	1,667	32,608
1983 .....	9,791	123	1,088	1,860	2,045	1,544	805	448	1,878	33,381
1984 2/ .....	10,341	132	1,032	2,028	2,168	1,691	956	488	1,846	34,929
1985 2/ .....	11,160	163	1,070	2,149	2,409	1,903	1,011	603	1,852	34,821
1986 2/ .....	12,485	200	1,087	2,151	2,890	2,224	1,159	675	2,079	36,039
1987 2/ .....	12,962	224	1,194	2,113	3,076	2,300	1,283	729	2,043	35,594
1988 .....	13,207	227	1,124	2,297	3,255	2,190	1,415	756	1,943	37,055
1989 .....	13,675	240	1,057	2,438	3,491	2,188	1,403	809	2,049	37,759
1990 .....	14,704	287	1,175	2,684	3,698	2,216	1,426	895	2,323	36,639
1991 .....	15,856	325	1,312	3,164	3,875	2,402	1,527	985	2,266	46,595

1/ Master's-granting institutions were not surveyed and sex data were not requested in 1978; totals represent estimates based on 1977 and 1979 data.

2/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: NA = Not available

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table B-4. Full-time science and engineering graduate students in all institutions, by sex and field: 1975-91

Page 1 of 2

Year	Total, all surveyed fields	Sciences								
		Sciences, total	Physical sciences	Earth, atmos- pheric, and ocean sciences	Mathe- matical sciences	Computer sciences	Agri- cultural sciences	Biological sciences	Psychology	Social sciences
Total enrollment										
1975 .....	220,123	164,793	21,916	9,677	10,695	4,473	8,839	37,000	24,105	48,088
1976 .....	223,855	168,157	22,252	10,219	10,952	4,748	9,400	38,002	25,643	48,941
1977 .....	227,187	169,448	22,505	10,556	10,365	4,604	9,653	38,502	25,703	47,560
1978 1/ .....	255,072	165,537	22,158	10,511	9,804	4,926	9,598	38,122	24,963	45,455
1979 .....	232,376	169,378	22,535	10,724	9,667	5,853	9,879	38,106	25,859	48,755
1980 .....	238,868	172,073	22,918	10,969	9,902	6,587	10,070	37,812	26,678	47,137
1981 .....	242,777	172,586	23,308	11,038	10,154	7,445	10,165	37,426	26,715	48,335
1982 .....	245,378	172,360	24,038	11,436	10,814	9,171	9,971	36,829	25,812	44,289
1983 .....	252,846	176,007	25,205	12,068	10,957	10,687	9,926	36,862	26,693	43,609
1984 2/ .....	254,735	178,433	25,652	11,837	11,311	11,587	9,851	37,234	26,102	42,659
1985 2/ .....	258,241	179,126	26,669	11,458	11,818	14,101	9,191	37,141	25,751	42,997
1986 2/ .....	267,075	183,418	27,764	11,347	12,390	15,310	9,314	37,917	26,469	42,907
1987 2/ .....	271,772	186,023	28,414	10,543	13,044	15,572	9,063	38,529	27,308	43,550
1988 .....	276,225	188,593	28,574	10,299	13,514	15,393	9,072	39,522	28,386	43,853
1989 .....	283,849	193,532	29,207	10,143	13,695	15,797	9,001	40,680	29,608	45,401
1990 .....	288,981	197,825	29,042	10,273	13,834	16,859	9,052	40,420	30,694	47,651
1991 .....	308,669	206,868	30,131	10,414	14,259	16,552	9,238	42,929	32,382	50,763
Men										
1975 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976 .....	163,954	121,405	19,205	8,551	8,476	4,006	7,905	26,247	14,591	32,424
1977 .....	162,186	119,589	19,293	8,731	8,083	3,845	7,861	25,922	13,949	31,905
1978 1/ .....	157,722	115,003	18,862	8,506	7,625	4,076	7,662	25,121	13,171	29,980
1979 .....	159,997	115,647	19,044	8,471	7,497	4,803	7,707	24,538	13,279	30,308
1980 .....	161,262	114,537	19,215	8,451	7,595	5,184	7,712	23,881	12,780	29,719
1981 .....	161,921	113,129	19,307	8,429	7,613	5,718	7,804	23,275	12,065	28,918
1982 .....	163,608	111,971	19,641	8,608	8,023	6,860	7,489	22,228	11,281	27,841
1983 .....	168,630	113,495	20,371	9,054	8,039	8,038	7,413	22,042	11,401	27,137
1984 2/ .....	169,534	113,612	20,755	8,942	8,327	8,825	7,278	22,095	10,754	26,636
1985 2/ .....	171,680	115,150	21,241	8,587	8,612	11,009	6,800	21,891	10,351	26,659
1986 2/ .....	177,260	117,128	22,023	8,405	8,995	11,931	6,920	22,065	10,317	26,472
1987 2/ .....	180,005	117,954	22,384	7,826	9,489	12,203	6,681	22,271	10,411	26,689
1988 .....	180,472	117,532	22,208	7,510	9,803	12,009	6,604	22,616	10,286	26,496
1989 .....	183,742	119,421	22,547	7,349	9,762	12,516	6,496	22,962	10,550	27,239
1990 .....	185,454	120,399	22,341	7,348	9,800	13,352	6,406	22,533	10,680	27,939
1991 .....	194,125	123,775	22,869	7,241	10,048	13,016	6,365	23,653	10,873	29,710
Women										
1975 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976 .....	59,901	46,752	3,047	1,668	2,476	742	1,495	11,755	11,052	14,517
1977 .....	65,001	49,859	3,212	1,825	2,282	759	1,792	12,580	11,754	15,655
1978 1/ .....	67,300	50,534	3,296	2,005	2,179	850	1,936	13,001	11,792	15,475
1979 .....	72,379	53,731	3,491	2,253	2,170	1,050	2,172	13,568	12,580	16,447
1980 .....	77,586	57,536	3,703	2,518	2,307	1,403	2,358	13,931	13,898	17,418
1981 .....	80,856	59,457	4,001	2,609	2,541	1,727	2,361	14,151	14,650	17,417
1982 .....	81,770	60,389	4,397	2,828	2,791	2,311	2,482	14,601	14,531	18,448
1983 .....	84,216	62,512	4,834	3,014	2,918	2,649	2,513	14,820	15,292	18,472
1984 2/ .....	85,201	62,821	5,097	2,895	2,984	2,762	2,573	15,139	15,348	18,023
1985 2/ .....	86,561	63,978	5,428	2,871	3,206	3,092	2,391	15,250	15,400	18,338
1986 2/ .....	89,815	66,290	5,741	2,942	3,395	3,379	2,394	15,852	16,152	18,435
1987 2/ .....	91,767	68,069	6,030	2,717	3,555	3,369	2,382	16,258	16,897	18,861
1988 .....	95,753	71,061	6,366	2,789	3,711	3,384	2,468	16,906	18,080	17,357
1989 .....	100,107	74,111	6,660	2,794	3,933	3,281	2,505	17,718	19,058	18,162
1990 .....	103,527	77,426	6,701	2,927	4,034	3,507	2,644	17,887	20,014	19,712
1991 .....	114,544	82,893	7,262	3,173	4,211	3,536	2,873	19,276	21,509	21,053

See explanatory information, if any, and SOURCE(S) at end of table.

BEST COPY AVAILABLE

Table B-4. Full-time science and engineering graduate students in all institutions, by sex and field: 1975-91

Page 2 of 2

Year	Engineering									Health fields
	Engineering, total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical & materials engineering	Other engineering	
Total enrollment										
1975 .....	37,813	1,245	3,743	7,383	8,278	4,152	4,931	1,787	6,314	17,517
1976 .....	36,950	1,165	4,014	7,025	8,147	3,578	4,919	1,860	6,242	18,748
1977 .....	37,225	1,187	4,174	7,111	8,528	3,343	4,883	1,951	6,048	20,514
1978 1/ .....	37,913	1,138	4,258	7,673	8,512	3,256	4,952	1,973	6,151	21,622
1979 .....	40,017	1,152	4,555	7,637	9,039	3,743	5,428	2,135	6,328	22,981
1980 .....	42,720	1,327	4,883	7,964	9,963	3,784	5,841	2,254	6,744	24,075
1981 .....	45,851	1,483	5,382	8,805	10,450	3,639	6,422	2,454	7,216	24,340
1982 .....	49,865	1,522	6,084	9,398	11,533	3,827	7,267	2,478	7,756	23,153
1983 .....	53,931	1,840	6,489	9,807	13,203	3,322	8,330	2,704	8,236	22,908
1984 2/ .....	55,157	1,854	6,348	10,089	13,857	3,433	8,698	2,872	8,006	23,145
1985 2/ .....	55,938	1,994	6,123	9,760	14,752	3,517	8,875	3,093	7,824	23,177
1986 2/ .....	60,227	2,154	6,166	9,982	16,222	3,875	9,789	3,370	8,669	23,430
1987 2/ .....	61,885	2,372	6,264	9,651	17,040	4,233	10,164	3,436	8,725	23,864
1988 .....	63,187	2,533	5,958	9,957	17,653	4,398	10,426	3,464	8,798	24,445
1989 .....	64,546	2,772	5,788	9,974	18,396	4,761	10,464	3,715	8,676	25,771
1990 .....	65,692	3,010	5,853	10,074	18,567	4,863	10,662	3,922	8,741	25,464
1991 .....	71,230	3,314	6,309	11,214	19,988	5,705	11,654	4,059	8,987	30,771
Men										
1975 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976 .....	34,924	1,142	3,771	6,512	7,850	3,199	4,797	1,751	5,902	7,625
1977 .....	34,964	1,160	3,885	6,568	8,146	2,967	4,742	1,809	5,687	7,633
1978 1/ .....	35,082	1,108	3,902	6,849	8,109	2,828	4,769	1,805	5,712	7,687
1979 .....	38,579	1,116	4,097	6,739	8,585	3,164	5,170	1,922	5,786	7,771
1980 .....	38,860	1,273	4,371	7,064	9,405	3,097	5,525	2,023	6,102	7,885
1981 .....	41,225	1,432	4,815	7,678	9,739	2,944	6,075	2,167	6,375	7,567
1982 .....	44,609	1,449	5,379	8,155	10,715	3,056	6,834	2,170	6,851	7,028
1983 .....	48,320	1,760	5,657	8,512	12,248	2,703	7,847	2,380	7,213	6,815
1984 2/ .....	49,113	1,768	5,564	8,651	12,711	2,803	8,137	2,518	6,961	6,809
1985 2/ .....	49,654	1,868	5,322	8,266	13,553	2,870	8,316	2,654	6,805	6,876
1986 2/ .....	53,254	2,006	5,340	8,491	14,785	3,127	9,162	2,849	7,514	6,878
1987 2/ .....	54,601	2,205	5,351	8,247	15,498	3,480	9,440	2,867	7,513	7,450
1988 .....	55,543	2,365	5,135	8,389	15,979	3,842	9,591	2,885	7,557	7,397
1989 .....	56,370	2,592	4,972	8,322	16,582	3,835	9,609	3,077	7,381	7,951
1990 .....	57,002	2,811	4,937	8,294	16,622	3,934	9,824	3,229	7,351	8,053
1991 .....	61,479	3,060	5,283	9,173	17,816	4,646	10,708	3,315	7,478	8,871
Women										
1975 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976 .....	2,026	23	243	513	297	379	122	109	340	11,123
1977 .....	2,261	27	289	543	382	376	141	142	361	12,881
1978 1/ .....	2,831	30	356	824	403	428	183	168	439	13,935
1979 .....	3,438	36	458	898	454	579	258	213	542	15,210
1980 .....	3,860	54	492	900	558	667	316	231	642	16,190
1981 .....	4,826	51	567	1,127	711	695	347	287	841	16,773
1982 .....	5,256	73	705	1,243	818	771	433	308	905	16,125
1983 .....	5,611	80	832	1,295	955	619	483	324	1,023	16,093
1984 2/ .....	6,044	86	784	1,438	1,148	630	561	354	1,045	16,336
1985 2/ .....	6,284	126	801	1,494	1,199	647	559	439	1,019	16,301
1986 2/ .....	6,973	148	826	1,491	1,457	748	627	521	1,155	16,552
1987 2/ .....	7,284	167	913	1,404	1,542	753	724	569	1,212	16,414
1988 .....	7,644	168	823	1,568	1,674	756	835	579	1,241	17,048
1989 .....	8,176	160	816	1,652	1,814	926	855	638	1,295	17,820
1990 .....	8,690	199	916	1,780	1,945	929	838	693	1,390	17,411
1991 .....	9,751	254	1,026	2,041	2,172	1,059	946	744	1,509	21,900

1/ Master's-granting institutions were not surveyed and sex data were not requested in 1978; totals represent estimates based on 1977 and 1979 data.

2/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: NA = Not available

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table B-5. Full-time science and engineering graduate students in all institutions, by citizenship and field: 1975-91

Page 1 of 2

Year	Total, all surveyed fields	Sciences								
		Sciences, total	Physical sciences	Earth, atmospheric, and ocean sciences	Mathematical sciences	Computer sciences	Agricultural sciences	Biological sciences	Psychology	Social sciences
Total enrollment										
1975 .....	220,123	164,793	21,916	9,677	10,695	4,473	8,839	37,000	24,105	48,088
1976 .....	223,855	168,157	22,252	10,219	10,952	4,748	9,400	38,002	25,643	48,941
1977 .....	227,187	169,448	22,505	10,556	10,365	4,604	9,853	38,502	25,703	47,560
1978 1/ .....	225,072	165,537	22,158	10,511	9,804	4,926	9,598	38,122	24,963	45,455
1979 .....	232,376	169,378	22,535	10,724	9,667	5,853	9,879	38,108	25,859	46,755
1980 .....	238,868	172,073	22,918	10,969	9,902	6,587	10,070	37,812	26,878	47,137
1981 .....	242,777	172,586	23,308	11,038	10,154	7,445	10,165	37,426	26,715	46,335
1982 .....	245,378	172,360	24,038	11,438	10,814	9,171	9,971	38,829	25,812	44,269
1983 .....	252,846	176,007	25,205	12,068	10,957	10,687	9,926	36,862	26,893	43,609
1984 2/ .....	254,735	176,433	25,852	11,837	11,311	11,587	9,851	37,234	26,102	42,659
1985 2/ .....	258,241	179,126	26,669	11,458	11,818	14,101	9,191	37,141	25,751	42,997
1986 2/ .....	267,075	183,418	27,784	11,347	12,390	15,310	9,314	37,917	26,489	42,907
1987 2/ .....	271,772	186,023	28,414	10,543	13,044	15,572	9,063	38,529	27,308	43,550
1988 .....	276,225	188,593	28,574	10,299	13,514	15,393	9,072	39,522	28,366	43,853
1989 .....	283,849	193,532	29,207	10,143	13,695	15,797	9,001	40,680	29,608	45,401
1990 .....	288,981	197,825	29,042	10,273	13,834	16,859	9,052	40,420	30,694	47,651
1991 .....	308,669	206,668	30,131	10,414	14,259	16,552	9,238	42,929	32,382	50,763
U.S. citizens										
1975 3/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976 3/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977 3/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1978 3/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979 3/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1980 .....	188,515	141,667	17,174	9,570	6,648	4,521	7,814	33,256	25,468	37,218
1981 .....	188,228	139,895	17,037	9,534	6,513	4,887	7,767	32,602	25,711	35,844
1982 .....	187,863	138,476	17,553	9,789	6,926	5,981	7,561	31,825	24,733	34,108
1983 .....	190,810	139,141	17,973	10,374	6,715	6,724	7,429	31,382	25,600	32,944
1984 2/ .....	191,150	138,404	18,250	10,241	6,773	7,052	7,400	31,468	25,057	32,163
1985 2/ .....	189,898	137,422	18,186	9,767	7,000	8,551	6,821	30,826	24,590	31,681
1986 2/ .....	191,881	137,909	18,266	9,450	7,245	9,176	6,728	30,752	25,299	30,993
1987 2/ .....	192,930	137,937	18,386	8,575	7,550	9,087	6,415	30,497	26,114	31,313
1988 .....	192,500	137,530	18,090	8,119	7,740	8,635	6,411	30,504	27,037	30,994
1989 .....	196,844	140,240	18,068	7,818	7,710	8,788	6,350	30,641	28,263	32,602
1990 .....	198,742	142,334	17,523	7,842	7,941	8,887	6,177	29,994	29,212	34,758
1991 .....	213,354	149,065	18,234	7,854	8,376	8,559	6,360	31,387	30,762	37,533
Non-U.S. citizens										
1975 3/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976 3/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977 3/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1978 3/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979 3/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1980 .....	50,353	30,406	5,744	1,399	3,254	2,066	2,256	4,556	1,210	9,921
1981 .....	54,549	32,691	6,271	1,504	3,641	2,558	2,398	4,824	1,004	10,491
1982 .....	57,515	33,884	6,485	1,647	3,888	3,190	2,410	5,004	1,079	10,181
1983 .....	62,036	36,866	7,232	1,694	4,242	3,963	2,497	5,480	1,093	10,865
1984 2/ .....	63,585	38,029	7,602	1,596	4,538	4,535	2,451	5,766	1,045	10,498
1985 2/ .....	68,343	41,704	8,483	1,691	4,818	5,550	2,370	6,315	1,161	11,316
1986 2/ .....	75,194	45,509	9,498	1,897	5,145	6,134	2,586	7,185	1,170	11,914
1987 2/ .....	78,842	46,086	10,028	1,968	5,494	6,465	2,646	8,032	1,194	12,237
1988 .....	83,725	51,063	10,434	2,180	5,774	6,758	2,861	9,018	1,329	12,859
1989 .....	87,005	53,292	11,139	2,325	5,985	7,009	2,651	10,039	1,345	12,799
1990 .....	90,239	55,491	11,519	2,431	5,893	7,872	2,875	10,426	1,482	12,893
1991 .....	95,315	57,603	11,897	2,560	5,883	7,993	2,878	11,542	1,620	13,230

See explanatory information, if any, and SOURCE(S) at end of table.

BEST COPY AVAILABLE



**Table B-5. Full-time science and engineering graduate students in all institutions, by citizenship and field: 1975-91**

Page 2 of 2

Year	Engineering									Health fields
	Engi- neering, total	Aerospace engi- neering	Chemical engi- neering	Civil engi- neering	Electrical engi- neering	Industrial engi- neering	Mechanical engi- neering	Metallur- gical & materials engi- neering	Other engi- neering	
Total enrollment										
1975 .....	37,813	1,245	3,743	7,363	8,278	4,152	4,931	1,787	6,314	17,517
1976 .....	36,950	1,165	4,014	7,025	8,147	3,578	4,919	1,860	6,242	18,748
1977 .....	37,225	1,187	4,174	7,111	8,528	3,343	4,883	1,951	6,048	20,514
1978 1/ .....	37,913	1,138	4,258	7,673	8,512	3,256	4,952	1,973	6,151	21,622
1979 .....	40,017	1,152	4,555	7,637	9,039	3,743	5,428	2,135	6,328	22,981
1980 .....	42,720	1,327	4,863	7,964	9,963	3,764	5,841	2,254	6,744	24,075
1981 .....	45,851	1,483	5,382	8,805	10,450	3,639	6,422	2,454	7,216	24,340
1982 .....	49,865	1,522	6,084	9,398	11,533	3,827	7,267	2,478	7,756	23,153
1983 .....	53,931	1,840	6,489	9,807	13,203	3,322	6,330	2,704	8,236	22,908
1984 2/ .....	55,157	1,854	6,348	10,089	13,857	3,433	6,698	2,872	8,006	23,145
1985 2/ .....	55,938	1,994	6,123	9,760	14,752	3,517	8,875	3,093	7,824	23,177
1986 2/ .....	60,227	2,154	6,166	9,982	16,222	3,875	9,789	3,370	8,669	23,430
1987 2/ .....	61,885	2,372	6,264	9,651	17,040	4,233	10,164	3,436	8,725	23,864
1988 .....	63,187	2,533	5,958	9,957	17,653	4,398	10,426	3,464	8,798	24,445
1989 .....	64,546	2,772	5,788	9,974	18,396	4,761	10,464	3,715	8,676	25,771
1990 .....	65,692	3,010	5,853	10,074	18,567	4,863	10,662	3,922	8,741	25,464
1991 .....	71,230	3,314	6,309	11,214	19,988	5,705	11,654	4,059	8,987	30,771
U.S. citizens										
1975 3/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976 3/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977 3/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1978 3/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979 3/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1980 .....	24,812	759	2,660	4,675	5,666	2,313	3,211	1,147	4,381	22,036
1981 .....	26,139	882	2,985	5,167	5,665	2,044	3,363	1,342	4,691	22,194
1982 .....	28,536	945	3,483	5,442	6,421	2,201	3,767	1,297	4,980	20,851
1983 .....	31,170	1,088	3,960	5,545	7,363	1,957	4,327	1,530	5,400	20,499
1984 2/ .....	31,959	1,115	3,930	5,688	7,861	1,963	4,591	1,663	5,148	20,787
1985 2/ .....	31,841	1,258	3,664	5,290	8,113	1,899	4,858	1,805	4,954	20,635
1986 2/ .....	33,244	1,343	3,717	5,311	8,523	2,079	5,218	1,854	5,199	20,728
1987 2/ .....	33,893	1,559	3,671	5,104	8,959	2,174	5,518	1,829	5,079	21,100
1988 .....	33,610	1,502	3,204	5,215	9,264	2,274	5,305	1,804	5,042	21,360
1989 .....	34,153	1,757	2,884	5,104	9,683	2,467	5,617	1,887	4,754	22,451
1990 .....	34,396	1,870	2,810	5,337	9,609	2,439	5,680	2,021	4,630	22,012
1991 .....	37,350	2,190	2,941	6,064	10,136	2,827	6,099	2,083	5,010	26,939
Non-U.S. citizens										
1975 3/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976 3/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977 3/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1978 3/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979 3/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1980 .....	17,908	568	2,203	3,289	4,297	1,451	2,630	1,107	2,363	2,039
1981 .....	19,712	601	2,397	3,638	4,785	1,595	3,059	1,112	2,525	2,146
1982 .....	21,329	577	2,801	3,956	5,112	1,626	3,500	1,181	2,776	2,302
1983 .....	22,761	752	2,529	4,262	5,840	1,365	4,003	1,174	2,836	2,409
1984 2/ .....	23,198	739	2,418	4,401	5,996	1,470	4,107	1,209	2,858	2,358
1985 2/ .....	24,097	736	2,459	4,470	6,639	1,618	4,017	1,288	2,870	2,542
1986 2/ .....	26,983	811	2,449	4,671	7,699	1,796	4,571	1,516	3,470	2,702
1987 2/ .....	27,992	813	2,593	4,547	8,081	2,059	4,646	1,607	3,646	2,764
1988 .....	29,577	1,031	2,754	4,742	8,389	2,124	5,121	1,660	3,756	3,085
1989 .....	30,393	1,015	2,904	4,870	8,713	2,294	4,847	1,828	3,922	3,320
1990 .....	31,296	1,140	3,043	4,737	8,958	2,424	4,982	1,901	4,111	3,452
1991 .....	33,880	1,124	3,368	5,150	9,852	2,878	5,555	1,976	3,977	3,832

1/ Master's-granting institutions were not surveyed and sex data were not requested in 1978; totals represent estimates based on 1977 and 1979 data.

2/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

3/ Data on citizenship distribution were not requested before 1980.

KEY: NA = Not available

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table B-6. Part-time science and engineering graduate students in all institutions, by sex and field: 1975-91

Page 1 of 2

Year	Total, all surveyed fields	Sciences								
		Sciences, total	Physical sciences	Earth, atmos- pheric, and ocean sciences	Mathe- matical sciences	Computer sciences	Agri- cultural sciences	Biological sciences	Psychology	Social sciences
Total enrollment										
1975 .....	109,079	70,262	4,394	2,612	6,223	3,942	1,820	9,530	12,086	29,655
1976 .....	110,528	70,864	4,379	2,815	6,140	3,879	1,839	9,843	11,815	30,154
1977 .....	118,775	73,781	4,350	3,102	5,704	4,504	1,953	10,835	12,914	30,419
1978 1/ .....	120,115	74,429	4,221	2,973	5,273	4,999	2,155	10,478	13,225	31,105
1979 .....	126,468	78,831	4,160	3,130	5,384	5,837	2,281	10,223	13,918	33,898
1980 .....	129,522	80,145	4,027	3,239	5,448	6,991	2,287	9,914	13,939	34,300
1981 .....	133,756	80,861	4,061	3,384	5,752	8,992	2,041	9,388	13,959	33,104
1982 .....	138,171	83,507	4,149	3,738	6,364	10,641	2,451	9,277	14,270	32,617
1983 .....	139,530	81,197	4,251	3,522	6,423	12,929	2,470	8,909	14,219	28,474
1984 2/ .....	141,714	81,542	4,204	3,818	6,148	14,223	2,330	8,658	14,835	27,326
1985 2/ .....	147,191	84,268	4,312	4,133	5,762	15,743	2,308	9,135	15,422	27,453
1986 2/ .....	149,367	83,489	4,484	3,863	5,577	16,087	2,119	8,995	14,948	27,416
1987 2/ .....	149,669	83,850	4,316	3,979	5,480	16,565	2,032	8,609	15,019	27,850
1988 .....	149,527	85,089	4,388	3,741	5,589	17,161	2,022	8,467	15,788	27,913
1989 .....	151,012	86,840	4,412	3,706	5,643	16,801	2,125	8,577	16,438	29,138
1990 .....	155,365	90,144	4,579	3,832	5,948	17,514	2,225	9,063	17,549	29,434
1991 .....	167,022	94,165	4,769	4,333	5,733	18,176	2,237	9,191	19,210	30,516
Men										
1975 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977 .....	83,163	49,350	3,523	2,576	3,861	3,704	1,655	6,659	6,569	20,803
1978 1/ .....	60,609	47,968	3,314	2,404	3,504	4,014	1,776	6,209	6,274	20,471
1979 .....	81,788	48,929	3,158	2,454	3,525	4,564	1,826	5,847	6,147	21,408
1980 .....	82,771	49,455	3,132	2,489	3,670	5,307	1,816	5,491	6,248	21,302
1981 .....	82,518	47,708	3,048	2,516	3,801	6,510	1,649	4,799	5,835	19,550
1982 .....	83,480	46,836	3,127	2,785	4,077	7,506	1,907	4,649	5,696	19,089
1983 .....	83,436	46,571	3,207	2,578	4,137	8,930	1,850	4,336	5,248	16,285
1984 2/ .....	84,037	46,755	3,143	2,764	3,958	10,080	1,762	4,234	5,427	15,367
1985 2/ .....	87,627	48,100	3,233	3,019	3,603	11,336	1,711	4,420	5,387	15,391
1986 2/ .....	88,414	47,515	3,362	2,810	3,497	11,882	1,550	4,326	5,115	15,173
1987 2/ .....	88,593	47,632	3,230	2,882	3,440	11,988	1,444	4,244	5,119	15,285
1988 .....	86,492	47,604	3,257	2,680	3,526	12,341	1,396	3,944	5,277	15,203
1989 .....	86,680	47,948	3,270	2,575	3,574	12,147	1,490	3,917	5,282	15,691
1990 .....	89,059	49,080	3,349	2,637	3,773	12,854	1,522	4,156	5,184	15,605
1991 .....	93,260	51,203	3,433	3,010	3,658	13,436	1,522	4,170	5,728	16,246
Women										
1975 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977 .....	35,612	24,431	827	528	1,843	800	298	4,176	6,345	9,616
1978 1/ .....	39,506	26,463	907	569	1,769	985	379	4,269	6,951	10,634
1979 .....	44,680	29,902	1,002	676	1,859	1,273	455	4,376	7,771	12,490
1980 .....	46,751	30,690	895	750	1,778	1,684	471	4,423	7,691	12,998
1981 .....	51,238	32,953	1,013	868	1,951	2,482	392	4,569	8,124	13,554
1982 .....	54,691	34,671	1,022	953	2,287	3,135	544	4,628	8,574	13,528
1983 .....	56,094	34,626	1,044	944	2,288	3,999	620	4,573	8,971	12,189
1984 2/ .....	57,677	34,787	1,081	1,034	2,190	4,143	568	4,424	9,408	11,959
1985 2/ .....	59,564	36,166	1,079	1,114	2,159	4,407	597	4,715	10,035	12,062
1986 2/ .....	60,953	35,974	1,122	1,053	2,080	4,405	569	4,669	9,833	12,243
1987 2/ .....	61,076	36,218	1,086	1,097	2,040	4,577	588	4,365	9,900	12,565
1988 .....	63,035	37,465	1,131	1,081	2,063	4,820	626	4,523	10,511	12,710
1989 .....	64,332	38,894	1,142	1,131	2,069	4,654	635	4,660	11,156	13,447
1990 .....	66,306	41,064	1,230	1,195	2,175	4,660	703	4,907	12,365	13,829
1991 .....	73,762	42,962	1,336	1,323	2,075	4,740	715	5,021	13,482	14,270

See explanatory information, if any, and SOURCE(S) at end of table.

BEST COPY AVAILABLE

Table B-6. Part-time science and engineering graduate students in all institutions, by sex and field: 1975-91

Page 2 of 2

Year	Engineering									Health fields
	Engi- neering, total	Aerospace engi- neering	Chemical engi- neering	Civil engi- neering	Electrical engi- neering	Industrial engi- neering	Mechanical engi- neering	Metallur- gical & materials engi- neering	Other engi- neering	
Total enrollment										
1975 .....	30,547	425	1,593	5,197	8,042	7,511	3,870	565	3,544	8,270
1976 .....	29,800	312	1,567	4,970	7,779	7,109	3,394	515	4,154	9,864
1977 .....	31,557	331	1,406	5,241	8,878	7,095	3,839	608	4,159	13,437
1978 1/ .....	30,748	322	1,493	5,098	8,853	6,313	3,752	596	4,321	14,938
1979 .....	31,790	329	1,474	5,199	8,678	6,971	3,823	621	4,697	15,847
1980 .....	31,745	410	1,655	5,147	9,169	5,973	4,047	656	4,688	17,632
1981 .....	33,907	400	1,835	5,298	9,663	6,158	4,108	671	5,808	19,188
1982 .....	34,033	419	1,691	4,748	10,394	5,814	4,200	648	6,121	20,631
1983 .....	37,180	465	1,811	5,114	11,913	6,051	4,581	743	6,502	21,153
1984 2/ .....	37,623	486	1,789	5,114	12,341	6,102	5,157	785	5,869	22,549
1985 2/ .....	40,222	544	1,809	5,156	13,274	7,324	5,282	850	5,983	22,701
1986 2/ .....	41,913	650	1,593	5,005	13,577	8,013	5,924	838	6,313	23,965
1987 2/ .....	42,004	643	1,580	5,067	14,174	8,224	6,114	930	5,272	23,815
1988 .....	39,972	690	1,402	4,865	14,184	7,333	5,781	871	4,846	24,486
1989 .....	39,773	682	1,337	4,945	14,659	6,697	5,775	874	4,804	24,399
1990 .....	41,637	856	1,474	5,380	15,016	6,748	5,793	999	5,371	23,584
1991 .....	43,177	727	1,529	6,051	15,284	7,628	6,166	1,090	4,702	29,680
Men										
1975 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977 .....	30,113	325	1,307	4,954	8,550	6,718	3,707	587	3,987	3,700
1978 1/ .....	28,927	313	1,353	4,749	8,455	5,857	3,589	541	4,070	3,716
1979 .....	29,343	316	1,287	4,774	8,197	6,299	3,612	546	4,312	3,516
1980 .....	29,265	390	1,427	4,681	8,744	5,290	3,829	584	4,320	4,051
1981 .....	30,779	384	1,372	4,849	9,098	5,309	3,912	568	5,287	4,031
1982 .....	30,466	382	1,453	4,239	9,681	4,954	3,914	534	5,359	4,148
1983 .....	33,000	422	1,555	4,549	10,823	5,126	4,259	619	5,647	3,865
1984 2/ .....	33,326	440	1,521	4,524	11,299	5,041	4,782	671	5,068	3,956
1985 2/ .....	35,346	507	1,540	4,501	12,084	6,068	4,830	686	5,150	4,181
1986 2/ .....	36,421	598	1,332	4,345	12,144	6,537	5,392	684	5,369	4,478
1987 2/ .....	36,326	586	1,299	4,358	12,640	6,677	5,555	770	4,441	4,635
1988 .....	34,409	631	1,101	4,136	12,603	5,899	5,201	694	4,144	4,479
1989 .....	34,274	622	1,096	4,159	12,982	5,435	5,227	703	4,050	4,460
1990 .....	35,623	768	1,215	4,476	13,263	5,481	5,205	797	4,438	4,356
1991 .....	37,072	656	1,243	4,928	13,581	6,285	5,585	849	3,945	4,985
Women										
1975 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977 .....	1,444	8	99	287	328	379	132	41	172	9,737
1978 1/ .....	1,821	9	140	349	398	456	163	55	251	11,222
1979 .....	2,447	13	187	425	479	672	211	75	385	12,331
1980 .....	2,480	20	228	466	425	683	218	72	368	13,581
1981 .....	3,128	16	263	449	565	849	284	103	599	15,157
1982 .....	3,537	37	238	509	733	860	288	112	762	16,483
1983 .....	4,180	43	256	565	1,090	925	322	124	855	17,268
1984 2/ .....	4,297	46	248	590	1,042	1,061	395	114	801	18,593
1985 2/ .....	4,876	37	269	655	1,210	1,256	452	164	833	18,520
1986 2/ .....	5,492	52	261	660	1,433	1,476	532	154	924	19,487
1987 2/ .....	5,678	57	281	709	1,534	1,547	559	160	831	19,180
1988 .....	5,563	59	301	729	1,581	1,434	580	177	702	20,007
1989 .....	5,499	60	241	786	1,677	1,262	548	171	754	19,939
1990 .....	6,014	88	259	904	1,753	1,287	588	202	933	19,228
1991 .....	6,105	71	286	1,123	1,703	1,343	581	241	757	24,695

1/ Master's-granting institutions were not surveyed and sex data were not requested in 1978; totals represent estimates based on 1977 and 1979 data.

2/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: NA = Not available

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



**Table B-7. Science and engineering graduate students in historically black colleges and universities, by enrollment status and field: 1975-91**

Page 1 of 2

Year	Total, all surveyed fields	Sciences								
		Sciences, total	Physical sciences	Earth, atmos- pheric, and ocean sciences	Mathematical sciences	Computer sciences	Agri- cultural sciences	Biological sciences	Psychology	Social sciences
Total enrollment										
1975 .....	2,315	1,978	231	14	210	45	49	491	250	688
1976 .....	2,677	2,442	245	21	244	100	53	650	303	826
1977 .....	2,899	2,635	277	28	207	129	78	625	265	1,026
1978 1/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979 .....	3,212	2,873	244	23	138	135	105	665	274	1,289
1980 .....	3,189	2,796	248	30	154	139	72	640	291	1,222
1981 .....	3,391	3,007	284	23	168	150	83	610	268	1,421
1982 .....	3,269	2,836	268	31	206	232	87	605	227	1,160
1983 .....	3,446	2,958	319	32	235	271	82	593	384	1,042
1984 .....	3,875	3,288	347	39	266	320	109	536	436	1,235
1985 .....	3,587	3,062	320	34	240	304	66	479	404	1,215
1986 .....	3,432	2,894	299	19	265	279	55	425	419	1,133
1987 .....	3,202	2,707	300	16	259	229	52	409	374	1,068
1988 .....	3,474	2,939	328	36	252	277	64	414	443	1,125
1989 .....	3,429	2,845	336	27	255	290	66	447	440	984
1990 .....	3,564	3,004	322	48	179	404	131	419	448	1,053
1991 .....	3,855	3,118	353	62	187	429	122	469	487	1,029
Full-time										
1975 .....	1,628	1,403	182	6	80	7	34	372	167	555
1976 .....	1,785	1,638	194	11	95	45	39	459	193	602
1977 .....	1,847	1,683	225	20	70	55	44	471	162	636
1978 1/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979 .....	2,047	1,819	197	16	56	81	60	519	175	715
1980 .....	2,205	1,933	212	20	101	96	41	491	178	794
1981 .....	2,411	2,146	255	18	120	87	42	479	153	992
1982 .....	2,230	1,929	256	29	111	153	46	487	120	727
1983 .....	2,231	1,912	271	27	137	185	39	511	132	810
1984 .....	2,357	1,982	258	25	139	202	79	422	173	684
1985 .....	2,335	1,927	262	25	141	212	27	369	159	732
1986 .....	2,142	1,823	239	7	143	206	26	339	183	680
1987 .....	2,091	1,726	244	9	168	163	36	325	163	618
1988 .....	2,285	1,877	272	18	169	209	41	299	202	667
1989 .....	2,108	1,668	232	17	160	169	45	339	197	509
1990 .....	2,077	1,715	215	24	95	216	106	331	175	553
1991 .....	2,339	1,845	256	31	104	253	99	362	219	521
Part-time										
1975 .....	687	575	49	8	130	38	15	119	83	133
1976 .....	892	804	51	10	149	55	14	191	110	224
1977 .....	1,052	952	52	8	137	74	34	154	103	390
1978 1/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979 .....	1,165	1,054	47	7	82	54	45	146	99	574
1980 .....	984	863	36	10	53	43	31	149	113	428
1981 .....	980	861	29	5	48	63	41	131	115	429
1982 .....	1,039	907	32	2	95	79	41	118	107	433
1983 .....	1,215	1,046	48	5	98	86	43	82	252	432
1984 .....	1,518	1,306	89	14	127	118	30	114	263	551
1985 .....	1,252	1,135	58	9	99	92	39	110	245	483
1986 .....	1,260	1,071	60	12	122	73	29	86	236	453
1987 .....	1,111	981	56	7	91	66	16	84	211	450
1988 .....	1,189	1,062	56	18	83	68	23	115	241	458
1989 .....	1,321	1,177	104	10	95	121	21	108	243	475
1990 .....	1,487	1,289	107	24	84	188	25	88	273	500
1991 .....	1,516	1,273	97	31	83	176	23	107	248	508

See explanatory information, if any, and SOURCE(S) at end of table.

**Table B-7. Science and engineering graduate students in historically black colleges and universities, by enrollment status and field: 1975-91**

Page 2 of 2

Page 2 of 2

Year	Engineering									Health fields
	Engineering, total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical & materials engineering	Other engineering	
Total enrollment										
1975 .....	180	0	0	67	28	28	34	0	23	157
1976 .....	148	0	0	67	29	0	35	0	17	87
1977 .....	155	0	0	39	69	0	25	0	22	109
1978 1/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979 .....	212	0	0	75	26	0	21	0	86	127
1980 .....	264	0	0	85	46	26	22	0	85	129
1981 .....	242	0	0	53	66	7	30	0	86	142
1982 .....	267	0	0	44	64	8	30	0	121	186
1983 .....	311	0	0	47	94	23	47	0	100	177
1984 .....	405	0	0	65	131	37	93	0	79	182
1985 .....	342	0	0	46	121	20	81	0	74	183
1986 .....	374	0	0	47	61	0	63	0	203	164
1987 .....	335	0	0	52	129	10	65	0	79	160
1988 .....	380	0	0	57	111	26	102	0	84	155
1989 .....	383	0	0	72	129	26	72	0	84	201
1990 .....	394	0	0	60	132	28	100	0	74	166
1991 .....	412	0	16	75	132	34	94	0	61	325
Full-time										
1975 .....	135	0	0	51	13	28	30	0	13	90
1976 .....	109	0	0	53	19	0	30	0	7	38
1977 .....	105	0	0	23	48	0	19	0	15	59
1978 1/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979 .....	159	0	0	26	17	0	16	0	60	69
1980 .....	191	0	0	68	37	16	17	0	53	81
1981 .....	170	0	0	43	59	7	25	0	36	95
1982 .....	192	0	0	31	57	8	26	0	70	109
1983 .....	195	0	0	34	84	10	34	0	33	124
1984 .....	258	0	0	38	102	22	63	0	33	117
1985 .....	273	0	0	42	111	18	71	0	31	135
1986 .....	197	0	0	32	45	0	60	0	60	122
1987 .....	248	0	0	35	104	10	60	0	39	117
1988 .....	296	0	0	40	104	20	92	0	40	112
1989 .....	290	0	0	57	104	19	64	0	46	150
1990 .....	236	0	0	28	81	20	72	0	35	126
1991 .....	305	0	15	32	125	24	81	0	28	189
Part-time										
1975 .....	45	0	0	16	15	0	4	0	10	67
1976 .....	39	0	0	14	10	0	5	0	10	49
1977 .....	50	0	0	16	21	0	6	0	7	50
1978 1/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979 .....	53	0	0	13	9	0	5	0	26	58
1980 .....	73	0	0	17	9	10	5	0	32	48
1981 .....	72	0	0	10	7	0	5	0	50	47
1982 .....	75	0	0	13	7	0	4	0	51	57
1983 .....	118	0	0	13	10	13	13	0	67	53
1984 .....	147	0	0	27	29	15	30	0	46	65
1985 .....	69	0	0	4	10	2	10	0	43	48
1986 .....	177	0	0	15	16	0	3	0	143	42
1987 .....	87	0	0	17	25	0	5	0	40	43
1988 .....	64	0	0	17	7	6	10	0	44	43
1989 .....	93	0	0	15	25	7	8	0	38	51
1990 .....	158	0	0	32	51	8	28	0	39	40
1991 .....	107	0	1	43	7	10	13	0	33	136

1/ Master's-granting institutions were not surveyed in 1978.

KEY: NA = Not available

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table B-9. Science and engineering graduate students in land-grant institutions,  
by enrollment status and field: 1975-91**

Page 1 of 2

Year	Total, all surveyed fields	Sciences								
		Sciences, total	Physical sciences	Earth, atmospheric, and ocean sciences	Mathematical sciences	Computer sciences	Agricultural sciences	Biological sciences	Psychology	Social sciences
Total enrollment										
1975 .....	109,229	78,768	10,036	4,957	5,232	3,013	8,774	18,529	6,955	21,272
1976 .....	111,301	80,386	10,334	5,451	5,060	3,058	9,222	19,357	6,955	20,949
1977 .....	112,079	81,034	10,448	5,643	4,892	3,082	9,474	19,595	6,809	21,091
1978 1/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979 .....	114,189	81,212	10,413	5,556	4,676	3,285	9,823	19,215	6,721	21,543
1980 .....	117,723	82,545	10,616	5,678	4,672	3,722	9,869	19,306	6,823	21,859
1981 .....	118,890	82,188	10,774	5,857	4,771	3,952	9,912	19,122	6,762	21,038
1982 .....	121,589	82,621	11,153	6,104	4,922	4,346	10,002	18,793	6,753	20,548
1983 .....	123,937	83,644	11,516	6,338	5,191	4,858	9,971	18,826	6,977	19,967
1984 .....	124,877	84,609	11,783	6,329	5,461	5,393	9,722	18,886	7,130	19,905
1985 .....	126,901	85,462	12,102	6,295	5,619	6,059	9,280	19,001	7,369	19,737
1986 .....	131,199	87,030	12,589	6,247	5,956	6,258	9,291	19,225	7,386	20,078
1987 .....	131,516	86,607	12,775	5,885	6,296	6,378	9,056	19,160	7,065	19,992
1988 .....	133,296	87,786	12,959	5,727	6,651	6,469	8,941	19,331	7,530	20,178
1989 .....	136,500	89,652	13,094	5,786	6,783	6,567	8,875	19,688	7,818	21,041
1990 .....	138,012	90,946	13,221	5,587	7,057	6,765	8,941	19,557	8,002	21,816
1991 .....	145,328	93,338	13,302	5,678	7,237	6,874	9,053	20,286	8,299	22,609
Full-time										
1975 .....	90,181	66,104	9,266	4,157	4,396	1,945	7,525	16,392	5,977	16,446
1976 .....	91,313	67,301	9,463	4,617	4,206	2,054	7,948	17,102	5,922	15,989
1977 .....	90,869	67,040	9,518	4,762	4,101	1,986	8,143	17,134	5,711	15,685
1978 1/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979 .....	91,931	66,486	9,634	4,678	3,906	2,250	8,138	16,789	5,630	15,461
1980 .....	94,165	67,159	9,855	4,703	3,927	2,493	8,239	16,822	5,461	15,659
1981 .....	95,674	67,749	10,011	4,857	4,138	2,763	8,469	16,785	5,443	15,283
1982 .....	96,292	67,405	10,309	5,029	4,255	3,073	8,305	16,294	5,415	14,725
1983 .....	98,388	68,222	10,647	5,273	4,439	3,459	8,229	16,350	5,332	14,493
1984 .....	100,004	69,121	10,932	5,157	4,612	3,766	8,100	16,554	5,470	14,530
1985 .....	100,585	69,307	11,113	4,960	4,831	4,466	7,645	16,412	5,510	14,370
1986 .....	104,746	71,383	11,626	5,013	5,100	4,762	7,768	16,842	5,644	14,628
1987 .....	105,305	71,502	11,901	4,618	5,531	4,828	7,662	16,913	5,560	14,489
1988 .....	106,617	72,019	11,987	4,446	5,744	4,697	7,593	17,002	5,838	14,712
1989 .....	108,645	73,296	12,117	4,574	5,920	4,752	7,383	17,405	5,972	15,173
1990 .....	109,601	74,209	12,132	4,423	6,015	4,985	7,431	17,212	5,956	16,055
1991 .....	115,046	76,523	12,274	4,432	6,123	5,027	7,517	17,965	6,399	16,786
Part-time										
1975 .....	19,048	12,664	770	800	836	1,068	1,249	2,137	978	4,826
1976 .....	19,988	13,085	871	834	854	1,004	1,274	2,255	1,033	4,960
1977 .....	21,210	13,994	930	881	791	1,096	1,331	2,461	1,098	5,406
1978 1/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979 .....	22,258	14,726	779	878	770	1,015	1,685	2,426	1,091	6,082
1980 .....	23,558	15,386	761	975	745	1,229	1,630	2,484	1,362	6,200
1981 .....	23,216	14,439	763	1,000	633	1,189	1,443	2,337	1,319	5,755
1982 .....	25,297	15,216	844	1,075	667	1,273	1,697	2,499	1,338	5,823
1983 .....	25,549	15,422	869	1,065	752	1,399	1,742	2,476	1,645	5,474
1984 .....	24,873	15,408	851	1,172	849	1,627	1,622	2,332	1,660	5,375
1985 .....	26,316	16,155	989	1,335	788	1,593	1,635	2,589	1,859	5,367
1986 .....	26,453	15,647	963	1,234	856	1,496	1,523	2,383	1,742	5,450
1987 .....	26,211	15,105	874	1,267	765	1,550	1,394	2,247	1,505	5,503
1988 .....	26,679	15,767	972	1,281	907	1,772	1,348	2,329	1,692	5,486
1989 .....	27,855	16,356	977	1,212	863	1,815	1,492	2,283	1,846	5,868
1990 .....	28,411	16,737	1,089	1,164	1,042	1,780	1,510	2,345	2,046	5,761
1991 .....	30,282	16,815	1,028	1,246	1,114	1,847	1,536	2,321	1,900	5,823

See explanatory information, if any, and SOURCE(S) at end of table.

Table B-8. Science and engineering graduate students in land-grant institutions,  
by enrollment status and field: 1975-91

Page 2 of 2

Page 2 of 2

Year	Engineering									Health fields
	Engi- neering, total	Aerospace engi- neering	Chemical engi- neering	Civil engi- neering	Electrical engi- neering	Industrial engi- neering	Mechanics engi- neering	Metallur- gical & materials engi- neering	Other engi- neering	
Total enrollment										
1975 .....	22,976	640	2,090	4,519	5,455	2,335	3,327	1,012	3,598	7,485
1976 .....	23,064	617	2,121	4,663	5,287	2,351	3,254	1,065	3,706	7,851
1977 .....	22,878	588	2,174	4,461	5,352	2,364	3,166	1,084	3,689	8,167
1978 1/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979 .....	23,749	566	2,274	4,569	5,230	2,645	3,453	1,226	3,786	9,228
1980 .....	25,178	651	2,522	4,850	5,727	2,829	3,768	1,259	3,572	10,000
1981 .....	26,605	709	2,735	4,845	6,081	2,567	4,124	1,318	4,226	10,097
1982 .....	28,651	729	2,967	5,007	6,889	2,725	4,595	1,313	4,626	10,317
1983 .....	30,630	856	3,159	5,407	7,505	2,309	5,182	1,403	4,809	9,883
1984 .....	30,460	838	3,076	5,484	7,770	2,410	5,365	1,544	3,993	9,808
1985 .....	31,422	902	3,015	5,480	8,377	2,773	5,267	1,665	3,943	10,017
1986 .....	33,992	973	3,954	5,564	9,134	3,048	5,804	1,796	4,619	10,177
1987 .....	34,769	997	3,128	5,579	9,657	2,997	6,040	1,803	4,568	10,140
1988 .....	34,968	1,078	2,944	5,845	9,717	2,836	6,138	1,828	4,582	10,542
1989 .....	35,780	1,148	2,999	5,881	9,972	3,068	6,021	1,977	4,694	11,088
1990 .....	36,877	1,257	3,091	6,087	10,059	3,032	6,284	2,146	4,721	10,389
1991 .....	38,951	1,398	3,201	6,618	10,409	3,562	6,589	2,245	4,929	13,039
Full-time										
1975 .....	17,910	502	1,739	3,568	4,048	1,772	2,522	881	2,882	6,187
1976 .....	17,740	506	1,791	3,698	3,974	1,702	2,441	953	2,675	6,272
1977 .....	17,417	478	1,838	3,540	3,825	1,596	2,395	988	2,759	6,412
1978 1/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979 .....	18,487	470	2,008	3,757	3,820	1,863	2,717	1,089	2,763	6,958
1980 .....	19,727	557	2,209	3,993	4,351	2,012	2,910	1,078	2,817	7,279
1981 .....	20,862	608	2,400	3,979	4,724	1,740	3,301	1,198	2,912	7,063
1982 .....	22,083	657	2,647	4,145	4,941	1,763	3,632	1,183	3,115	6,804
1983 .....	23,339	774	2,814	4,444	5,530	1,330	4,133	1,261	3,053	6,827
1984 .....	23,865	728	2,748	4,470	5,876	1,392	4,222	1,380	3,071	6,998
1985 .....	24,141	783	2,633	4,412	6,100	1,484	4,215	1,492	3,042	7,137
1986 .....	26,210	848	2,729	4,589	6,687	1,600	4,651	1,610	3,496	7,153
1987 .....	26,741	886	2,844	4,601	6,876	1,563	4,843	1,627	3,501	7,062
1988 .....	27,244	969	2,632	4,843	7,133	1,562	5,006	1,636	3,463	7,354
1989 .....	27,767	1,047	2,709	4,790	7,394	1,683	4,949	1,799	3,396	7,582
1990 .....	28,274	1,103	2,772	4,956	7,380	1,680	5,068	1,881	3,414	7,118
1991 .....	30,123	1,255	2,892	5,266	7,906	1,883	5,292	1,951	3,678	8,400
Part-time										
1975 .....	5,066	138	351	953	1,409	563	805	131	716	1,318
1976 .....	5,324	111	330	965	1,313	649	813	112	1,031	1,579
1977 .....	5,461	110	338	921	1,527	768	771	96	930	1,755
1978 1/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979 .....	5,262	96	266	812	1,410	782	736	137	1,023	2,270
1980 .....	5,451	94	313	857	1,376	817	858	181	955	2,721
1981 .....	5,743	101	335	866	1,357	827	823	120	1,314	3,034
1982 .....	6,568	72	320	862	1,748	962	963	130	1,511	3,513
1983 .....	7,291	82	345	963	1,975	979	1,049	142	1,756	2,838
1984 .....	6,575	112	328	994	1,894	1,018	1,143	164	922	2,810
1985 .....	7,281	119	382	1,068	2,277	1,309	1,052	173	901	2,880
1986 .....	7,782	125	325	975	2,447	1,448	1,153	186	1,123	3,024
1987 .....	8,028	111	284	978	2,781	1,434	1,197	176	1,067	3,078
1988 .....	7,724	109	312	1,002	2,584	1,274	1,132	192	1,119	3,188
1989 .....	7,993	101	290	1,091	2,578	1,385	1,072	178	1,298	3,506
1990 .....	8,403	154	319	1,131	2,679	1,352	1,196	265	1,307	3,271
1991 .....	8,828	143	309	1,352	2,503	1,679	1,297	294	1,251	4,639

1/ Master's-granting institutions were not surveyed in 1978.

KEY: NA = Not available

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table B-9. Science and engineering graduate students in all institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all surveyed fields	392,378	396,449	405,432	416,442	421,441	425,752	434,881	444,346	475,691
Total, science & engineering fields	348,315	350,755	359,554	369,047	373,762	378,821	384,691	395,298	415,240
Engineering, total	91,111	92,780	96,160	102,140	103,889	103,159	104,319	107,329	114,407
Aerospace	2,305	2,340	2,538	2,804	3,015	3,223	3,454	3,868	4,041
Agricultural	969	954	941	1,054	1,083	1,039	1,031	939	983
Biomedical	1,244	1,345	1,373	1,549	1,689	1,755	1,919	2,112	2,233
Chemical	7,583	7,373	7,150	7,012	7,026	6,818	6,460	6,675	7,127
Civil	14,921	15,203	14,916	14,987	14,718	14,822	14,919	15,454	17,285
Electrical	25,116	26,198	28,028	29,799	31,214	31,837	33,055	33,583	35,272
Engineering science	2,261	2,153	2,098	2,362	2,343	2,388	2,077	2,011	2,154
Industrial	9,373	9,535	10,841	11,688	12,457	11,731	11,458	11,811	13,333
Mechanical	12,911	13,855	14,157	15,713	16,278	16,207	16,239	16,455	17,820
Metallurgical/materials	3,447	3,657	3,943	4,208	4,366	4,335	4,589	4,921	5,149
Mining	524	502	489	512	513	489	418	437	489
Nuclear	1,203	1,234	1,220	1,265	1,279	1,303	1,323	1,278	1,282
Petroleum	737	744	782	747	818	742	665	652	711
Engineering, n.e.c.	8,537	7,887	7,688	8,240	7,110	6,872	6,712	7,335	6,548
Sciences, total	257,204	257,975	263,394	266,907	269,873	273,682	280,372	287,969	300,833
Physical sciences	29,456	30,056	30,981	32,248	32,730	32,962	33,819	33,621	34,900
Astronomy	618	639	671	689	722	731	789	810	829
Chemistry	17,796	17,752	18,300	18,737	18,819	18,572	18,812	18,695	19,422
Physics	10,806	11,331	11,872	12,439	12,807	13,308	13,657	13,760	14,221
Physical sciences, n.e.c.	236	334	338	383	362	351	361	356	428
Earth, atmospheric, & ocean sciences	15,590	15,655	15,591	15,210	14,522	14,040	13,849	14,105	14,747
Atmospheric sciences	896	907	964	961	952	940	912	929	968
Geosciences	10,321	10,370	10,294	9,819	8,998	8,465	8,058	7,714	7,628
Oceanography	2,063	2,102	2,081	2,128	2,033	2,033	2,207	2,248	2,293
Earth, atmos., & ocean sci., n.e.c.	2,310	2,276	2,252	2,302	2,445	2,602	2,672	3,214	3,658
Mathematical sciences	17,380	17,459	17,580	17,967	18,524	19,103	19,338	19,782	19,992
Computer sciences	23,616	25,810	29,844	31,397	32,137	32,554	32,598	34,373	34,728
Agricultural sciences	12,396	12,181	11,499	11,433	11,095	11,094	11,126	11,277	11,475
Biological sciences	45,771	45,892	46,276	46,912	47,138	47,989	49,257	49,483	52,120
Anatomy	1,037	1,029	993	973	1,011	1,056	1,078	996	1,046
Biochemistry	4,205	4,462	4,666	4,885	4,823	4,933	5,094	5,021	5,216
Biology	13,051	12,890	12,721	12,666	12,493	12,557	12,920	13,056	13,486
Biometry/epidemiology	1,156	1,004	1,360	1,434	1,810	1,735	1,777	1,923	2,068
Biophysics	450	433	441	547	591	592	655	599	663
Botany	3,299	3,251	3,188	3,149	3,005	2,938	2,844	2,587	2,681
Cell biology	1,182	1,258	1,429	1,716	1,964	2,078	2,234	2,427	2,604
Ecology	1,007	1,088	1,028	1,012	963	1,028	1,109	1,177	1,226
Entomology/parasitology	1,475	1,438	1,342	1,306	1,244	1,240	1,181	1,173	1,171
Genetics	1,035	1,059	1,120	1,262	1,314	1,289	1,365	1,331	1,524
Microbiology	4,262	4,326	4,447	4,374	4,455	4,774	4,827	4,789	4,937
Nutrition	4,351	4,277	4,314	4,321	4,288	4,228	4,259	4,268	4,251
Pathology	1,449	1,454	1,348	1,383	1,398	1,383	1,418	1,403	1,517
Pharmacology	2,069	2,050	2,107	2,080	2,077	2,132	2,272	2,297	2,436
Physiology	1,994	2,060	2,211	2,220	2,213	2,220	2,208	2,276	2,329
Zoology	2,430	2,303	2,135	2,083	2,113	2,034	2,089	2,038	2,192
Biosciences, n.e.c.	1,319	1,412	1,428	1,501	1,576	1,774	1,931	2,142	2,595
Psychology	40,912	40,937	41,173	41,417	42,327	44,154	46,046	48,243	51,592
Social sciences	72,083	69,985	70,450	70,323	71,400	71,766	74,539	77,085	81,279
Agricultural economics	2,295	2,279	2,268	2,248	2,203	2,259	2,278	2,273	2,386
Anthropology	5,844	5,590	5,631	5,805	5,710	5,945	6,128	6,465	6,895
Economics (except agricultural)	13,084	12,507	12,430	12,103	12,020	12,036	12,143	12,188	12,709
Geography	3,060	3,035	2,938	3,055	3,223	3,208	3,511	3,543	3,785
History and philosophy of science	253	274	272	266	294	288	342	369	383
Linguistics	3,022	3,160	3,055	3,109	3,282	3,243	3,340	3,439	3,452
Political science	28,050	25,921	27,012	27,251	27,608	27,884	29,303	29,754	31,929
Sociology	6,920	6,740	6,567	6,454	6,945	7,045	7,358	7,739	8,314
Sociology/anthropology	1,200	1,075	1,034	1,021	982	991	1,022	1,183	1,028
Social sciences, n.e.c.	8,575	9,404	9,245	9,011	9,133	8,867	9,116	10,134	10,618
Total, health fields	44,061	45,694	45,878	47,395	47,679	48,931	50,170	49,048	60,451
Dentistry	776	854	836	829	1,049	1,078	998	941	1,030
Neurology	261	317	336	382	494	600	732	802	1,006
Nursing	16,945	17,987	17,083	17,512	17,195	17,128	16,634	14,173	22,289
Pharmaceutical sciences	2,641	2,519	2,553	2,682	2,607	2,613	2,917	2,790	3,152
Preventive medicine/community health	6,679	6,841	7,287	7,230	7,496	7,679	7,689	8,243	8,595
Speech pathology/audiology	7,836	7,745	7,986	7,957	7,402	7,688	8,088	8,435	9,319
Veterinary sciences	466	557	637	630	731	752	801	900	894
Clinical medicine, n.e.c.	1,625	1,558	1,709	1,670	1,741	1,806	1,796	1,781	2,084
Health related, n.e.c.	8,832	7,318	7,451	8,403	8,964	9,607	10,515	10,983	12,102

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



Table B-10. Science and engineering graduate students in all institutions, by geographic distribution: 1983-91

Page 1 of 1

Geographic distribution	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all institutions .....	392,376	396,449	405,432	416,442	421,441	425,752	434,861	444,346	475,691
New England .....	30,779	28,625	29,570	30,100	29,822	32,904	32,436	32,590	34,932
Connecticut .....	6,898	8,105	6,391	6,356	6,581	7,049	7,116	7,144	7,217
Maine .....	509	580	523	538	614	849	667	689	752
Massachusetts .....	19,917	18,641	19,313	19,703	19,100	21,396	20,751	20,947	22,896
New Hampshire .....	857	803	844	878	846	1,068	1,100	1,166	1,199
Rhode Island .....	1,924	1,834	1,883	1,993	2,074	2,068	2,138	1,968	2,184
Vermont .....	674	662	616	632	607	674	664	676	684
Middle Atlantic .....	72,850	68,968	69,516	71,408	70,048	76,537	76,665	77,580	82,009
New Jersey .....	10,230	10,809	10,885	11,028	11,372	11,895	11,447	11,479	11,860
New York .....	43,997	41,131	41,327	42,707	41,058	44,944	44,877	45,362	47,649
Pennsylvania .....	18,623	17,028	17,304	17,673	17,618	19,698	20,341	20,739	22,500
East North Central .....	67,611	64,641	65,536	68,035	70,583	74,775	77,670	78,532	83,758
Illinois .....	19,443	18,665	19,459	20,093	21,024	22,655	23,519	23,802	24,590
Indiana .....	8,567	7,651	7,137	7,881	8,217	8,716	9,269	9,687	10,111
Michigan .....	13,223	13,610	13,755	14,277	14,470	14,600	15,890	16,328	17,055
Ohio .....	17,750	16,921	17,484	18,017	18,933	19,853	19,694	19,557	21,944
Wisconsin .....	8,828	7,794	7,701	7,767	7,939	8,951	9,298	9,158	10,058
West North Central .....	25,797	23,846	24,385	24,902	25,139	27,417	28,125	28,640	30,873
Iowa .....	4,749	4,517	4,651	4,810	4,818	5,139	5,192	5,516	5,740
Kansas .....	5,106	4,397	4,257	4,265	4,418	4,758	5,156	5,163	5,478
Minnesota .....	5,846	5,255	5,641	5,570	5,373	6,640	6,855	6,987	7,398
Missouri .....	6,132	5,830	5,940	6,339	6,521	6,736	6,680	6,828	7,421
Nebraska .....	2,229	2,165	2,139	2,130	2,238	2,346	2,380	2,473	2,781
North Dakota .....	946	906	949	970	915	947	947	886	916
South Dakota .....	789	776	808	818	856	851	915	987	1,139
South Atlantic .....	52,522	53,032	55,036	57,694	59,334	62,784	64,360	67,247	71,967
Delaware .....	1,180	1,112	1,150	1,189	1,303	1,198	1,197	1,169	1,470
District of Columbia .....	7,847	8,312	8,679	9,246	9,323	8,876	8,316	8,394	8,729
Florida .....	9,299	9,099	9,994	10,047	10,613	11,946	12,208	13,329	14,600
Georgia .....	5,978	6,290	6,005	6,386	6,726	7,278	7,599	7,800	8,701
Maryland .....	7,755	7,671	7,693	8,059	8,078	9,043	9,597	9,815	10,241
North Carolina .....	8,015	7,858	7,829	8,331	8,410	9,023	9,438	9,754	10,282
South Carolina .....	3,021	2,996	3,007	3,298	3,385	3,284	3,535	3,523	3,993
Virginia .....	7,208	7,635	8,703	9,201	9,659	10,131	10,452	11,239	11,588
West Virginia .....	2,219	2,059	1,976	1,937	1,837	2,005	2,018	2,224	2,363
East South Central .....	14,785	14,405	14,608	15,207	15,479	17,752	19,037	18,508	20,271
Alabama .....	3,683	3,824	4,187	4,506	4,830	5,329	5,779	5,780	6,486
Kentucky .....	3,341	2,837	2,736	2,742	2,885	3,842	4,105	3,646	4,119
Mississippi .....	2,288	2,512	2,443	2,573	2,505	2,680	2,811	2,657	2,847
Tennessee .....	5,473	5,232	5,242	5,386	5,259	5,901	6,342	6,425	6,819
West South Central .....	36,998	34,446	34,489	34,900	35,056	37,584	39,512	41,420	45,631
Arkansas .....	1,720	1,182	1,181	1,161	1,180	1,723	1,716	1,891	2,312
Louisiana .....	4,806	4,848	4,809	4,645	4,562	4,745	4,733	5,096	5,921
Oklahoma .....	3,887	3,829	3,942	3,898	4,211	4,120	4,132	4,562	4,849
Texas .....	26,585	24,587	24,557	25,196	25,103	26,996	28,931	29,871	32,549
Mountain .....	22,724	22,221	23,034	23,928	24,612	24,868	25,040	26,596	29,434
Arizona .....	6,147	6,212	6,743	6,705	6,723	7,012	7,167	7,355	7,648
Colorado .....	6,398	6,105	6,190	7,056	7,399	7,284	7,000	8,194	9,350
Idaho .....	1,004	1,008	1,041	1,035	1,173	1,225	1,348	1,510	1,512
Montana .....	1,094	1,086	1,049	980	970	1,050	1,065	1,048	1,137
Nevada .....	722	561	557	515	619	890	1,015	1,116	1,296
New Mexico .....	2,741	2,549	2,655	2,723	2,926	2,884	2,915	2,958	3,176
Utah .....	3,783	3,921	3,986	4,154	4,043	3,796	3,728	3,700	4,286
Wyoming .....	835	779	813	760	759	717	802	715	1,029
Pacific .....	86,015	60,338	63,009	63,845	65,018	68,900	69,709	70,618	73,975
Alaska .....	604	352	381	399	387	537	580	680	690
California .....	53,950	49,528	52,034	52,727	53,909	56,475	57,366	57,656	60,097
Hawaii .....	1,782	1,702	1,705	1,820	1,822	1,829	1,857	1,981	2,092
Oregon .....	3,358	3,234	3,262	3,429	3,454	3,634	3,612	3,717	4,181
Washington .....	6,311	5,522	5,627	5,470	5,446	6,425	6,294	6,584	6,915
Outlying areas .....	2,295	2,438	2,552	2,520	2,241	2,231	2,307	2,415	2,841
State unknown 2/ .....	0	23,491	23,697	23,903	24,109	0	0	0	0

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

2/ These numbers represent the total of all nonsampled master's-granting institutions.

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table B-11. Male science and engineering graduate students in all institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all surveyed fields .....	252,066	253,571	259,307	265,674	268,598	266,964	270,422	274,513	287,385
Total, science & engineering fields .....	241,386	242,806	248,250	254,318	256,513	255,088	258,011	262,104	273,529
Engineering, total .....	81,320	82,439	85,000	89,675	90,927	89,952	90,644	92,625	98,551
Aerospace .....	2,182	2,208	2,375	2,604	2,791	2,996	3,214	3,579	3,718
Agricultural .....	896	872	863	970	967	953	944	838	858
Biomedical .....	974	1,054	1,082	1,203	1,292	1,318	1,450	1,571	1,849
Chemical .....	6,547	6,401	6,146	5,973	5,886	5,543	5,431	5,531	5,867
Civil .....	13,081	13,175	12,787	12,836	12,605	12,525	12,481	12,770	14,101
Electrical .....	23,071	24,010	25,617	26,909	28,138	28,582	29,564	29,885	31,397
Engineering science .....	1,971	1,861	1,858	2,085	2,056	2,119	1,829	1,716	1,866
Industrial .....	7,829	7,844	8,938	9,664	10,157	9,541	9,270	9,395	10,931
Mechanical .....	12,106	12,899	13,146	14,554	14,995	14,792	14,836	15,029	16,293
Metalurgical/materials .....	2,999	3,189	3,340	3,533	3,637	3,579	3,780	4,026	4,164
Mining .....	477	458	459	476	473	441	372	379	439
Nuclear .....	1,119	1,146	1,113	1,142	1,151	1,176	1,182	1,123	1,105
Petroleum .....	665	684	716	699	764	693	637	621	659
Engineering, n.e.c. ....	7,423	6,638	6,580	7,047	6,015	5,696	5,654	6,162	5,506
Sciences, total .....	160,066	160,367	163,250	164,643	165,586	165,136	167,387	169,479	174,978
Physical sciences .....	23,578	23,898	24,474	25,385	25,614	25,465	25,817	25,690	26,302
Astronomy .....	526	541	563	568	602	591	649	645	657
Chemistry .....	13,285	13,113	13,513	13,713	13,645	13,108	13,150	12,966	13,153
Physics .....	9,605	10,040	10,175	10,862	11,134	11,557	11,789	11,854	12,224
Physical sciences, n.e.c. ....	162	204	223	242	233	209	229	225	268
Earth, atmospheric, & ocean sciences .....	11,632	11,726	11,606	11,215	10,708	10,170	9,924	9,983	10,251
Atmospheric sciences .....	766	769	807	782	784	777	734	744	778
Geosciences .....	7,808	7,882	7,810	7,463	6,834	6,370	6,092	5,784	5,605
Oceanography .....	1,497	1,501	1,471	1,461	1,493	1,388	1,482	1,505	1,491
Earth, atmos., & ocean sci., n.e.c. ....	1,561	1,574	1,518	1,509	1,597	1,635	1,616	1,950	2,377
Mathematical sciences .....	12,176	12,285	12,215	12,492	12,929	13,329	13,336	13,573	13,706
Computer sciences .....	18,968	18,905	22,345	23,613	24,191	24,350	24,663	26,206	26,452
Agricultural sciences .....	9,263	9,040	8,511	8,470	8,125	8,000	7,986	7,930	7,887
Biological sciences .....	26,378	26,329	26,311	26,391	26,515	26,560	26,879	26,689	27,823
Anatomy .....	632	605	569	560	574	598	598	541	547
Biochemistry .....	2,639	2,793	2,925	2,996	2,928	2,930	3,068	2,968	3,074
Biology .....	7,521	7,391	7,230	7,149	7,188	7,067	7,140	7,165	7,201
Biometry/epidemiology .....	547	472	640	666	761	786	754	886	921
Biophysics .....	338	326	331	410	450	443	493	446	500
Botany .....	2,091	2,062	1,993	2,014	1,854	1,814	1,754	1,565	1,602
Cell biology .....	774	789	911	1,044	1,199	1,233	1,290	1,353	1,524
Ecology .....	668	741	661	630	588	622	661	686	689
Entomology/parasitology .....	1,090	1,066	992	948	906	881	817	815	830
Genetics .....	512	547	597	665	673	660	675	648	763
Microbiology .....	2,385	2,408	2,490	2,429	2,457	2,617	2,588	2,509	2,578
Nutrition .....	1,326	1,319	1,349	1,307	1,341	1,232	1,252	1,286	1,294
Pathology .....	873	862	776	816	802	812	821	798	861
Pharmacology .....	1,328	1,277	1,302	1,267	1,233	1,282	1,302	1,294	1,301
Physiology .....	1,297	1,388	1,375	1,366	1,378	1,357	1,313	1,327	1,368
Zoology .....	1,609	1,483	1,372	1,307	1,316	1,246	1,296	1,227	1,311
Biosciences, n.e.c. ....	750	800	796	817	867	960	1,057	1,173	1,459
Psychology .....	16,649	16,181	15,736	15,432	15,530	15,563	15,632	15,864	18,601
Social sciences .....	43,422	42,003	42,050	41,645	41,974	41,699	42,930	43,544	45,956
Agricultural economics .....	1,807	1,791	1,761	1,747	1,696	1,713	1,694	1,674	1,735
Anthropology .....	2,438	2,439	2,510	2,460	2,442	2,499	2,548	2,678	2,768
Economics (except agricultural) .....	9,882	9,487	9,373	9,095	9,000	8,938	8,904	8,859	9,153
Geography .....	2,051	2,050	1,988	2,071	2,130	2,153	2,317	2,334	2,460
History and philosophy of science .....	161	187	180	169	198	184	217	235	237
Linguistics .....	1,217	1,259	1,198	1,252	1,305	1,296	1,344	1,384	1,541
Political science .....	17,277	16,181	16,492	16,511	16,672	16,420	17,070	16,887	18,065
Sociology .....	3,255	3,120	3,085	2,942	3,135	3,241	3,392	3,488	3,735
Sociology/anthropology .....	586	525	496	482	472	443	454	492	459
Social sciences, n.e.c. ....	4,748	4,984	4,967	4,916	4,924	4,812	4,990	5,513	5,803
Total, health fields .....	10,690	10,765	11,057	11,356	12,085	11,676	12,411	12,409	13,856
Dentistry .....	807	666	648	724	770	786	711	668	725
Neurology .....	189	208	207	236	308	357	438	447	572
Nursing .....	747	786	765	777	1,058	840	949	706	1,195
Pharmaceutical sciences .....	1,776	1,635	1,654	1,711	1,587	1,549	1,720	1,675	1,825
Preventive medicine/community health .....	2,821	2,793	2,968	3,047	3,369	3,181	2,910	3,206	3,368
Speech pathology/audiology .....	1,008	1,019	1,051	922	724	812	785	789	764
Veterinary sciences .....	289	346	401	394	453	452	470	512	528
Clinical medicine, n.e.c. ....	835	762	784	790	842	861	909	946	1,052
Health related, n.e.c. ....	2,410	2,550	2,579	2,755	2,974	3,038	3,519	3,460	3,607

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



**Table B-12. Male science and engineering graduate students in all institutions, by geographic distribution: 1983-91**

Page 1 of 1

Geographic distribution	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all institutions .....	252,066	253,571	259,307	265,674	268,598	268,964	270,422	274,513	287,385
New England .....	20,444	19,427	19,829	19,725	19,870	20,871	20,368	20,475	21,390
Connecticut .....	4,541	4,042	4,271	3,944	4,085	4,226	4,273	4,276	4,059
Maine .....	339	386	336	353	416	433	446	450	516
Massachusetts .....	13,350	12,836	13,071	13,200	12,923	13,792	13,218	13,323	14,335
New Hampshire .....	570	530	528	557	556	698	722	750	773
Rhode Island .....	1,248	1,194	1,241	1,318	1,358	1,338	1,324	1,285	1,308
Vermont .....	396	439	384	353	332	384	385	391	399
Middle Atlantic .....	44,770	42,886	43,559	44,935	44,424	46,884	47,163	46,934	48,848
New Jersey .....	6,790	7,489	7,625	7,588	8,174	8,257	8,053	7,751	7,790
New York .....	25,532	23,933	24,321	25,496	24,633	26,233	26,264	26,393	27,297
Pennsylvania .....	12,448	11,464	11,613	11,871	11,617	12,394	12,846	12,790	13,761
East North Central .....	43,877	42,229	42,882	43,927	45,642	47,270	48,255	48,790	50,828
Illinois .....	12,318	11,993	12,344	12,492	13,074	13,883	14,077	14,554	14,621
Indiana .....	5,619	4,765	4,859	5,048	5,303	5,493	5,839	5,933	6,209
Michigan .....	8,965	9,216	9,183	9,645	9,964	9,810	10,322	10,458	10,929
Ohio .....	11,469	11,152	11,406	11,666	12,211	12,542	12,269	11,987	13,018
Wisconsin .....	5,506	5,103	5,090	5,076	5,090	5,542	5,748	5,858	6,051
West North Central .....	16,847	15,753	15,963	16,360	16,416	17,574	17,761	18,028	18,696
Iowa .....	3,329	3,137	3,185	3,267	3,246	3,461	3,477	3,590	3,709
Kansas .....	3,055	2,743	2,618	2,613	2,744	2,936	3,095	3,077	3,143
Minnesota .....	3,570	3,285	3,638	3,668	3,516	4,032	4,026	4,058	4,168
Missouri .....	4,081	3,934	3,952	4,228	4,278	4,369	4,396	4,517	4,581
Nebraska .....	1,523	1,455	1,360	1,378	1,417	1,556	1,532	1,566	1,746
North Dakota .....	718	655	660	675	644	647	648	612	624
South Dakota .....	571	544	550	531	571	573	569	608	725
South Atlantic .....	33,202	33,692	34,640	38,565	37,301	38,287	38,858	40,058	42,111
Delaware .....	755	709	738	770	855	795	829	821	874
District of Columbia .....	5,201	5,537	5,665	5,939	5,767	5,289	4,741	4,814	4,902
Florida .....	6,079	5,975	6,431	6,571	6,848	7,409	7,674	8,050	8,717
Georgia .....	4,043	4,224	4,025	4,272	4,580	4,841	4,911	4,912	5,344
Maryland .....	4,262	4,159	4,255	4,427	4,590	5,037	5,342	5,383	5,498
North Carolina .....	4,874	4,863	4,698	5,126	5,022	5,416	5,573	5,733	5,850
South Carolina .....	1,991	2,045	1,958	2,218	2,296	2,128	2,260	2,267	2,554
Virginia .....	4,555	4,878	5,646	5,978	6,274	6,255	6,398	6,832	6,978
West Virginia .....	1,442	1,302	1,224	1,264	1,069	1,137	1,130	1,246	1,294
East South Central .....	9,364	9,295	9,268	9,782	9,819	11,283	11,706	11,714	12,416
Alabama .....	2,280	2,403	2,647	2,884	3,009	3,328	3,540	3,780	4,065
Kentucky .....	2,134	1,787	1,763	1,789	1,831	2,495	2,585	2,319	2,495
Mississippi .....	1,509	1,677	1,587	1,693	1,658	1,723	1,751	1,758	1,817
Tennessee .....	3,441	3,428	3,261	3,416	3,321	3,737	3,650	3,857	4,039
West South Central .....	23,813	22,433	22,749	23,100	23,492	23,605	25,020	28,191	28,472
Arkansas .....	1,039	834	806	797	804	928	890	921	1,299
Louisiana .....	3,137	3,211	3,188	3,111	3,105	3,097	3,149	3,377	3,802
Oklahoma .....	2,740	2,663	2,776	2,880	2,990	2,757	2,793	2,972	3,129
Texas .....	16,897	15,725	15,979	16,312	16,593	17,023	18,188	18,921	20,242
Mountain .....	15,768	15,240	15,950	16,329	16,762	16,820	17,015	17,659	19,027
Arizona .....	4,253	4,213	4,547	4,605	4,719	4,782	4,854	4,740	4,896
Colorado .....	4,192	3,932	4,060	4,500	4,584	4,610	4,636	5,330	5,841
Idaho .....	773	783	781	775	877	894	991	1,060	1,038
Montana .....	753	725	710	640	675	747	732	712	771
Nevada .....	458	404	419	354	423	590	660	735	796
New Mexico .....	1,934	1,780	1,844	1,884	2,052	1,956	1,964	2,069	2,100
Utah .....	2,734	2,819	2,901	2,979	2,881	2,718	2,639	2,513	2,931
Wyoming .....	671	584	688	592	571	523	539	500	654
Pacific .....	43,146	40,076	41,623	42,253	42,357	43,306	43,425	43,719	44,560
Alaska .....	420	258	275	293	274	353	373	420	429
California .....	35,068	32,747	34,475	34,811	34,994	35,370	35,630	35,702	35,873
Hawaii .....	1,049	1,013	984	1,102	1,087	1,058	1,092	1,133	1,233
Oregon .....	2,386	2,316	2,318	2,475	2,493	2,582	2,513	2,585	2,855
Washington .....	4,223	3,742	3,771	3,572	3,509	3,943	3,817	3,879	4,070
Outlying areas .....	835	1,086	1,101	1,058	985	864	851	945	1,037
State unknown 2/ .....	0	11,454	11,543	11,640	11,730	0	0	0	0

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

2/ These numbers represent the total of all nonsampled master's-granting institutions.

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table B-13. Female science and engineering graduate students in all institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all surveyed fields	140,310	142,878	146,125	150,768	152,843	158,788	164,439	169,833	188,306
Total, science & engineering fields	106,929	107,949	111,304	114,729	117,249	121,733	126,680	133,194	141,711
Engineering, total	9,791	10,341	11,160	12,465	12,962	13,207	13,675	14,704	15,856
Aerospace	123	132	163	200	224	227	240	287	325
Agricultural	73	82	78	84	96	86	87	101	125
Biomedical	270	291	291	346	397	439	469	541	584
Chemical	1,016	972	1,004	1,039	1,140	1,075	1,029	1,144	1,260
Civil	1,860	2,028	2,149	2,151	2,113	2,297	2,438	2,684	3,164
Electrical	2,045	2,188	2,409	2,890	3,076	3,255	3,491	3,698	3,875
Engineering science	290	292	240	297	287	267	248	295	288
Industrial	1,544	1,691	1,903	2,224	2,300	2,190	2,188	2,216	2,402
Mechanical	805	956	1,011	1,159	1,283	1,415	1,403	1,426	1,527
Metallurgical/materials	448	468	603	675	729	756	809	895	985
Mining	47	44	30	36	40	48	46	58	50
Nuclear	84	88	107	123	128	127	141	155	177
Petroleum	72	80	66	48	54	49	28	31	52
Engineering, n.e.c.	1,114	1,049	1,106	1,193	1,095	976	1,058	1,173	1,042
Sciences, total	97,138	97,608	100,144	102,264	104,287	108,526	113,005	118,490	125,855
Physical sciences	5,878	6,158	6,507	6,863	7,116	7,497	7,802	7,931	8,598
Astronomy	92	98	108	121	120	140	140	165	172
Chemistry	4,511	4,639	4,787	5,024	5,174	5,464	5,662	5,729	6,269
Physics	1,201	1,291	1,497	1,577	1,673	1,751	1,868	1,906	1,997
Physical sciences, n.e.c.	74	130	115	141	149	142	132	131	160
Earth, atmospheric, & ocean sciences	3,958	3,929	3,985	3,995	3,814	3,870	3,925	4,122	4,496
Atmospheric sciences	130	138	157	179	168	163	178	185	190
Geosciences	2,513	2,488	2,484	2,356	2,164	2,095	1,966	1,930	2,023
Oceanography	566	601	610	667	634	645	725	743	802
Earth, atmos., & ocean sci., n.e.c.	749	702	734	793	848	967	1,056	1,264	1,481
Mathematical sciences	5,204	5,174	5,365	5,475	5,595	5,774	6,002	6,209	6,286
Computer sciences	6,648	6,905	7,499	7,784	7,946	8,204	7,935	8,167	8,276
Agricultural sciences	3,133	3,141	2,988	2,963	2,970	3,094	3,140	3,347	3,588
Biological sciences	19,393	19,563	19,965	20,521	20,623	21,429	22,378	22,794	24,297
Anatomy	405	424	424	413	437	458	480	455	499
Biochemistry	1,568	1,669	1,741	1,889	1,895	2,003	2,026	2,053	2,142
Biology	5,530	5,499	5,491	5,517	5,305	5,490	5,780	5,891	6,285
Biometry/epidemiology	609	532	720	768	849	949	1,023	1,037	1,145
Biophysics	112	107	110	137	141	149	162	153	163
Botany	1,208	1,189	1,195	1,135	1,151	1,122	1,090	1,002	1,059
Cell biology	408	467	518	672	765	845	944	1,074	1,280
Ecology	341	347	367	382	375	406	448	489	537
Entomology/parasitology	385	372	350	358	338	359	364	358	341
Genetics	523	512	523	597	641	629	690	683	761
Microbiology	1,877	1,918	1,957	1,945	1,998	2,157	2,239	2,280	2,359
Nutrition	3,025	2,958	2,965	3,014	2,947	2,996	3,007	2,982	2,957
Pathology	576	592	568	567	596	571	595	805	656
Pharmacology	741	773	805	813	844	850	970	1,003	1,135
Physiology	697	772	836	854	835	863	893	949	961
Zoology	821	820	763	776	797	788	793	811	881
Biosciences, n.e.c.	569	612	632	684	709	794	874	969	1,136
Psychology	24,263	24,756	25,435	25,985	26,797	28,591	30,214	32,379	34,991
Social sciences	28,661	27,982	28,400	28,678	29,426	30,067	31,609	33,541	35,323
Agricultural economics	488	488	507	501	507	546	582	599	631
Anthropology	3,206	3,151	3,121	3,345	3,268	3,448	3,580	3,787	3,927
Economics (except agricultural)	3,182	3,020	3,057	3,008	3,020	3,098	3,239	3,327	3,556
Geography	1,009	985	948	984	1,093	1,055	1,194	1,209	1,325
History and philosophy of science	92	87	92	97	96	104	125	134	146
Linguistics	1,805	1,901	1,857	1,857	1,977	1,947	1,996	2,055	1,911
Political science	10,773	9,760	10,520	10,740	10,938	11,464	12,233	12,867	13,884
Sociology	3,665	3,620	3,482	3,512	3,810	3,804	3,966	4,251	4,579
Sociology/anthropology	614	550	538	539	510	548	568	691	569
Social sciences, n.e.c.	3,827	4,420	4,278	4,095	4,209	4,055	4,126	4,621	4,815
Total, health fields	33,381	34,929	34,821	36,039	35,594	37,055	37,759	36,639	46,595
Dentistry	169	188	188	205	279	292	287	273	305
Neurology	72	109	129	146	166	243	294	355	434
Nursing	16,198	17,201	16,318	16,735	16,137	16,288	15,685	13,467	21,094
Pharmaceutical sciences	865	884	899	971	1,020	1,064	1,197	1,115	1,327
Preventive medicine/community health	3,858	4,048	4,319	4,183	4,127	4,498	4,779	5,037	5,227
Speech pathology/audiology	6,830	6,726	6,935	7,035	6,678	6,856	7,303	7,646	8,535
Veterinary sciences	177	211	236	236	278	300	331	388	368
Clinical medicine, n.e.c.	790	794	925	880	899	945	887	835	1,012
Health related, n.e.c.	4,422	4,768	4,872	5,648	5,990	6,569	6,996	7,523	8,295

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table B-14. Female science and engineering graduate students in all institutions, by geographic distribution: 1983-91**

Page 1 of 1

Geographic distribution	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all institutions .....	140,310	142,878	146,125	150,768	152,843	158,788	164,439	169,833	188,306
New England .....	10,335	9,198	9,741	10,375	10,152	12,033	12,068	12,115	13,542
Connecticut .....	2,357	2,063	2,120	2,412	2,496	2,823	2,843	2,868	3,158
Maine .....	170	184	187	185	198	216	221	239	238
Massachusetts .....	6,567	5,805	6,242	6,503	6,177	7,604	7,533	7,624	8,581
New Hampshire .....	287	273	318	321	290	370	378	418	426
Rhode Island .....	678	640	642	675	716	730	814	683	878
Vermont .....	278	223	232	279	275	290	279	285	285
Middle Atlantic .....	28,080	26,082	25,957	26,473	25,624	29,653	29,502	30,646	33,181
New Jersey .....	3,440	3,340	3,260	3,460	3,198	3,638	3,394	3,728	4,070
New York .....	18,465	17,198	17,006	17,211	16,425	18,711	18,613	18,969	20,352
Pennsylvania .....	6,175	5,544	5,691	5,802	6,001	7,304	7,495	7,949	8,739
East North Central .....	23,734	22,412	22,854	24,108	24,941	27,505	29,415	29,742	32,830
Illinois .....	7,125	6,672	7,115	7,601	7,950	8,772	9,442	9,248	9,989
Indiana .....	2,948	2,886	2,278	2,833	2,914	3,223	3,430	3,754	3,902
Michigan .....	4,258	4,394	4,572	4,632	4,506	4,790	5,568	5,870	6,128
Ohio .....	8,281	5,769	6,078	6,351	6,722	7,311	7,425	7,570	8,928
Wisconsin .....	3,122	2,891	2,611	2,691	2,649	3,409	3,550	3,300	4,007
West North Central .....	8,950	8,093	8,422	8,542	8,723	9,843	10,364	10,812	12,177
Iowa .....	1,420	1,380	1,468	1,543	1,572	1,878	1,715	1,928	2,031
Kansas .....	2,051	1,654	1,639	1,652	1,874	1,822	2,061	2,086	2,335
Minnesota .....	2,276	1,970	2,003	1,902	1,857	2,608	2,829	2,929	3,230
Missouri .....	2,051	1,896	1,988	2,111	2,243	2,367	2,284	2,311	2,840
Nebraska .....	706	710	779	752	821	790	848	907	1,035
North Dakota .....	228	251	289	295	271	300	301	274	292
South Dakota .....	218	232	258	287	285	278	326	379	414
South Atlantic .....	19,320	19,340	20,396	21,129	22,033	24,497	25,502	27,189	29,856
Delaware .....	425	403	412	419	448	403	368	348	496
District of Columbia .....	2,646	2,775	3,014	3,307	3,556	3,607	3,575	3,580	3,827
Florida .....	3,220	3,124	3,583	3,478	3,765	4,537	4,534	5,279	5,883
Georgia .....	1,935	2,066	1,980	2,114	2,146	2,437	2,688	2,888	3,357
Maryland .....	3,493	3,512	3,438	3,632	3,488	4,006	4,255	4,432	4,743
North Carolina .....	3,141	2,995	3,131	3,205	3,388	3,607	3,865	4,021	4,432
South Carolina .....	1,030	951	1,049	1,080	1,089	1,156	1,275	1,256	1,439
Virginia .....	2,653	2,757	3,057	3,223	3,385	3,876	4,054	4,407	4,810
West Virginia .....	777	757	752	673	768	868	888	978	1,069
East South Central .....	5,421	5,110	5,340	5,425	5,660	6,469	7,331	6,794	7,855
Alabama .....	1,403	1,421	1,540	1,622	1,821	2,001	2,239	2,000	2,421
Kentucky .....	1,207	1,050	973	953	1,054	1,347	1,540	1,327	1,824
Mississippi .....	779	835	846	880	847	957	1,060	899	1,030
Tennessee .....	2,032	1,804	1,981	1,970	1,938	2,184	2,492	2,568	2,780
West South Central .....	13,185	12,013	11,740	11,800	11,564	13,779	14,492	15,229	17,159
Arkansas .....	681	348	375	364	376	795	828	970	1,013
Louisiana .....	1,669	1,837	1,821	1,534	1,457	1,646	1,584	1,719	2,119
Oklahoma .....	1,147	1,166	1,166	1,018	1,221	1,363	1,339	1,590	1,720
Texas .....	9,688	8,862	8,578	8,884	8,510	9,973	10,743	10,950	12,307
Mountain .....	6,956	6,981	7,084	7,599	7,850	8,048	8,025	8,937	10,407
Arizona .....	1,894	1,999	2,196	2,100	2,004	2,230	2,313	2,615	2,752
Colorado .....	2,206	2,173	2,130	2,556	2,835	2,674	2,364	2,864	3,509
Idaho .....	231	225	260	260	296	331	357	450	474
Montana .....	341	361	339	340	295	303	333	336	366
Nevada .....	264	157	138	161	196	300	355	381	500
New Mexico .....	807	789	811	839	874	938	951	889	1,076
Utah .....	1,049	1,102	1,085	1,175	1,162	1,078	1,089	1,187	1,355
Wyoming .....	164	195	125	168	188	194	263	215	375
Pacific .....	22,869	20,262	21,186	21,592	22,661	25,594	26,284	26,899	29,415
Alaska .....	184	94	106	106	113	184	207	260	261
California .....	18,892	18,781	17,559	17,916	18,915	21,105	21,736	21,954	24,124
Hawaii .....	733	689	721	718	735	771	765	848	859
Oregon .....	972	918	944	954	961	1,052	1,099	1,132	1,326
Washington .....	2,088	1,780	1,856	1,898	1,937	2,482	2,477	2,705	2,845
Outlying areas .....	1,460	1,350	1,451	1,462	1,256	1,367	1,456	1,470	1,804
State unknown 2/ .....	0	12,037	12,154	12,263	12,379	0	0	0	0

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

2/ These numbers represent the total of all nonsampled master's-granting institutions.

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table B-15. Science and engineering graduate students in public institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all surveyed fields	266,277	270,640	274,945	284,363	289,582	293,226	302,875	310,462	333,690
Total, science & engineering fields	235,240	238,443	242,722	250,712	254,871	257,522	265,905	275,094	289,516
Engineering, total	57,212	58,312	60,847	65,421	68,481	68,658	71,036	73,840	79,872
Aerospace	1,613	1,670	1,821	2,038	2,226	2,340	2,533	2,914	3,162
Agricultural	916	900	888	1,003	1,015	994	981	891	943
Biomedical	702	759	768	944	1,056	1,104	1,208	1,260	1,311
Chemical	5,057	4,959	4,841	4,805	4,807	4,877	4,519	4,785	5,166
Civil	10,337	10,689	10,587	10,639	11,116	11,228	11,305	11,600	12,995
Electrical	13,675	14,328	15,934	17,545	19,087	19,382	20,391	21,003	22,572
Engineering science	1,367	1,228	1,139	1,296	1,277	1,270	1,257	1,228	1,367
Industrial	4,726	5,044	5,778	6,284	6,410	6,613	7,263	7,456	8,968
Mechanical	8,470	9,056	9,494	10,642	11,231	11,150	11,137	11,467	12,799
Metallurgical/materials	2,028	2,211	2,369	2,574	2,680	2,636	2,865	3,174	3,450
Mining	456	434	424	442	443	421	358	361	359
Nuclear	963	1,011	1,009	1,058	1,075	1,092	1,107	1,073	1,093
Petroleum	464	496	567	592	632	585	531	521	576
Engineering, n.e.c.	6,440	5,527	5,168	5,579	5,426	5,286	5,581	6,109	5,113
Sciences, total	178,028	180,131	181,875	185,291	186,390	188,864	194,869	201,254	209,644
Physical sciences	21,009	21,451	22,032	23,185	23,558	23,794	24,238	24,249	25,227
Astronomy	419	433	442	469	492	495	516	536	546
Chemistry	12,901	12,848	13,158	13,555	13,642	13,491	13,629	13,447	13,960
Physics	7,453	7,836	8,118	8,822	9,113	9,497	9,753	9,931	10,328
Physical sciences, n.e.c.	236	334	314	339	311	311	340	335	393
Earth, atmospheric, & ocean sciences	13,104	13,192	13,111	12,826	12,232	11,794	11,556	11,801	12,291
Atmospheric sciences	843	856	906	903	892	887	883	901	948
Geosciences	8,556	8,585	8,561	8,176	7,488	7,013	6,623	6,336	6,282
Oceanography	1,759	1,780	1,707	1,777	1,809	1,757	1,850	1,888	1,918
Earth, atmos., & ocean sci., n.e.c.	1,946	1,971	1,937	1,970	2,043	2,137	2,200	2,676	3,143
Mathematical sciences	12,327	12,581	12,884	13,557	14,133	14,663	14,913	15,545	15,607
Computer sciences	14,358	15,412	17,403	18,297	18,323	18,580	19,127	20,254	20,928
Agricultural sciences	11,950	11,758	11,066	11,017	10,685	10,655	10,702	10,791	10,955
Biological sciences	34,187	34,351	34,527	34,944	34,979	35,630	36,496	36,363	38,242
Anatomy	694	689	655	636	657	714	750	711	760
Biochemistry	2,848	3,017	3,208	3,387	3,291	3,402	3,473	3,456	3,553
Biology	9,344	9,230	9,225	9,157	9,095	9,199	9,487	9,560	10,030
Biometry/epidemiology	641	657	718	828	907	1,023	1,072	1,134	1,267
Biophysics	245	220	260	317	356	343	382	313	353
Botany	3,129	3,117	3,054	3,002	2,848	2,774	2,680	2,398	2,489
Cell biology	621	705	742	909	1,063	1,177	1,260	1,356	1,587
Ecology	926	1,005	955	937	885	916	974	1,030	1,032
Entomology/parasitology	1,426	1,383	1,290	1,256	1,177	1,178	1,115	1,105	1,102
Genetics	713	717	779	901	948	909	936	921	1,062
Microbiology	3,198	3,215	3,363	3,287	3,350	3,618	3,624	3,569	3,578
Nutrition	3,407	3,350	3,368	3,431	3,459	3,418	3,499	3,555	3,545
Pathology	958	952	936	938	983	928	974	957	1,060
Pharmacology	1,385	1,397	1,419	1,422	1,434	1,482	1,547	1,599	1,674
Physiology	1,396	1,487	1,510	1,469	1,488	1,476	1,515	1,538	1,530
Zoology	2,263	2,157	2,003	1,961	1,994	1,915	1,962	1,904	2,041
Biosciences, n.e.c.	993	1,053	1,042	1,086	1,044	1,156	1,246	1,257	1,579
Psychology	23,998	24,112	24,351	24,457	24,805	25,659	26,496	27,739	28,867
Social sciences	47,095	47,274	46,501	47,008	47,675	48,089	51,341	54,512	57,527
Agricultural economics	2,204	2,175	2,168	2,171	2,124	2,151	2,165	2,158	2,251
Anthropology	4,061	4,072	4,091	4,151	4,202	4,294	4,477	4,723	4,949
Economics (except agricultural)	8,040	7,813	7,753	7,767	7,630	7,663	7,726	7,886	8,389
Geography	2,840	2,824	2,717	2,871	3,036	3,013	3,325	3,356	3,586
History and philosophy of science	141	153	138	134	134	149	182	206	214
Linguistics	2,095	2,127	1,983	2,073	2,195	2,187	2,311	2,464	2,408
Political science	15,995	15,946	15,941	16,335	16,408	17,086	18,646	19,876	21,027
Sociology	4,998	4,960	4,786	4,775	5,167	5,248	5,535	5,860	6,458
Sociology/anthropology	610	600	582	613	614	678	713	831	662
Social sciences, n.e.c.	6,111	6,604	6,342	6,118	6,185	5,618	6,261	7,152	7,583
Total, health fields	31,037	32,197	32,223	33,651	34,711	35,704	36,970	35,368	44,174
Dentistry	541	604	563	689	809	833	748	740	805
Neurology	149	183	204	237	295	373	411	424	519
Nursing	12,121	12,835	12,010	12,735	12,977	13,289	12,909	10,426	18,764
Pharmaceutical sciences	1,790	1,797	1,859	1,908	1,880	1,949	2,177	2,009	2,286
Preventive medicine/community health	4,094	4,181	4,439	4,446	4,756	4,906	5,013	5,717	5,979
Speech pathology/audiology	6,587	6,529	6,539	6,683	6,197	6,424	6,715	7,105	7,818
Veterinary sciences	401	481	551	548	646	663	718	821	821
Clinical medicine, n.e.c.	1,124	1,100	1,232	1,216	1,244	1,289	1,265	1,234	1,356
Health related, n.e.c.	4,250	4,507	4,826	5,189	5,907	5,978	7,014	6,892	7,826

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



Table B-16. Science and engineering graduate students in private institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all surveyed fields .....	126,099	125,809	130,487	132,079	131,859	132,526	131,986	133,884	142,001
Total, science & engineering fields .....	113,075	112,312	116,832	118,335	118,891	119,299	118,786	120,204	125,724
Engineering, total .....	33,899	34,468	35,313	36,719	35,408	34,501	33,283	33,489	34,535
Aerospace .....	692	670	717	766	789	883	921	952	879
Agricultural .....	53	54	53	51	48	45	50	48	40
Biomedical .....	542	586	605	605	633	651	711	852	922
Chemical .....	2,506	2,414	2,309	2,207	2,219	2,061	1,941	1,890	1,961
Civil .....	4,584	4,514	4,329	4,348	3,602	3,594	3,614	3,854	4,270
Electrical .....	11,441	11,870	12,032	12,254	12,127	12,455	12,664	12,580	12,700
Engineering science .....	894	925	959	1,066	1,066	1,116	820	785	787
Industrial .....	4,647	4,491	5,063	5,624	6,047	5,118	4,175	4,155	4,367
Mechanical .....	4,441	4,799	4,663	5,071	5,047	5,057	5,102	4,988	5,021
Metallurgical/materials .....	1,421	1,446	1,574	1,634	1,686	1,699	1,724	1,747	1,699
Mining .....	68	68	65	70	70	68	80	76	130
Nuclear .....	240	223	211	207	204	211	216	205	189
Petroleum .....	273	248	215	155	186	157	134	131	135
Engineering, n.e.c. ....	2,097	2,160	2,518	2,681	1,684	1,386	1,151	1,226	1,435
Sciences, total .....	79,176	77,844	81,519	81,616	83,483	84,798	85,503	86,715	91,189
Physical sciences .....	8,447	8,605	8,949	9,063	9,172	9,168	9,381	9,372	9,673
Astronomy .....	199	206	229	220	230	236	273	274	283
Chemistry .....	4,895	4,904	5,142	5,182	5,177	5,081	5,183	5,248	5,462
Physics .....	3,353	3,495	3,554	3,617	3,694	3,811	3,904	3,829	3,893
Physical sciences, n.e.c. ....	0	0	24	44	71	40	21	21	35
Earth, atmospheric, & ocean sciences .....	2,486	2,463	2,480	2,384	2,290	2,246	2,293	2,304	2,456
Atmospheric sciences .....	53	51	58	58	60	53	29	28	20
Geosciences .....	1,765	1,785	1,733	1,643	1,510	1,452	1,435	1,378	1,346
Oceanography .....	304	322	374	351	318	276	357	360	375
Earth, atmos., & ocean sci., n.e.c. ....	364	305	315	332	402	465	472	538	715
Mathematical sciences .....	5,053	4,878	4,696	4,410	4,391	4,440	4,425	4,237	4,365
Computer sciences .....	9,258	10,398	12,441	13,100	13,814	13,974	13,471	14,119	13,800
Agricultural sciences .....	446	423	433	416	410	439	424	486	520
Biological sciences .....	11,584	11,541	11,749	11,968	12,159	12,359	12,761	13,120	13,878
Anatomy .....	343	340	338	337	354	342	328	285	286
Biochemistry .....	1,357	1,445	1,458	1,498	1,532	1,531	1,621	1,565	1,663
Biology .....	3,707	3,660	3,496	3,509	3,398	3,358	3,433	3,496	3,456
Biometry/epidemiology .....	515	347	642	606	703	712	705	789	799
Biophysics .....	205	213	181	230	235	249	273	286	310
Botany .....	170	134	134	147	157	162	164	169	172
Cell biology .....	561	551	687	807	901	901	974	1,071	1,217
Ecology .....	81	83	73	75	78	112	135	147	194
Entomology/parasitology .....	49	55	52	50	67	62	66	66	69
Genetics .....	322	342	341	361	366	380	429	410	462
Microbiology .....	1,064	1,111	1,084	1,087	1,105	1,156	1,203	1,220	1,359
Nutrition .....	944	927	946	890	829	810	760	713	706
Pathology .....	491	502	410	445	415	455	442	446	457
Pharmacology .....	684	653	688	658	643	650	725	698	762
Physiology .....	598	673	701	731	725	744	691	738	799
Zoology .....	167	146	132	122	119	119	127	134	151
Biosciences, n.e.c. ....	326	359	386	415	532	616	685	685	1,016
Psychology .....	16,914	16,825	16,822	16,960	17,522	18,495	19,550	20,504	22,725
Social sciences .....	24,968	22,711	23,949	23,315	23,725	23,677	23,198	22,573	23,752
Agricultural economics .....	91	104	100	77	79	108	111	115	115
Anthropology .....	1,583	1,518	1,540	1,654	1,508	1,651	1,651	1,742	1,746
Economics (except agricultural) .....	5,024	4,694	4,677	4,336	4,390	4,373	4,417	4,300	4,320
Geography .....	220	211	219	184	187	195	186	187	199
History and philosophy of science .....	112	121	134	132	160	139	160	163	169
Linguistics .....	927	1,033	1,072	1,036	1,087	1,056	1,029	975	1,044
Political science .....	12,055	9,975	11,071	10,916	11,200	10,796	10,657	9,878	10,902
Sociology .....	1,922	1,780	1,781	1,679	1,778	1,797	1,823	1,879	1,856
Sociology/anthropology .....	590	475	452	408	368	313	309	352	366
Social sciences, n.e.c. ....	2,464	2,800	2,903	2,893	2,968	3,249	2,855	2,982	3,035
Total, health fields .....	13,024	13,497	13,655	13,744	12,968	13,227	13,200	13,680	16,277
Dentistry .....	235	250	273	240	240	245	250	201	225
Neurology .....	112	134	132	145	199	227	321	378	487
Nursing .....	4,824	5,152	5,073	4,777	4,218	3,839	3,725	3,747	5,525
Pharmaceutical sciences .....	851	722	694	774	727	664	740	781	866
Preventive medicine/community health .....	2,585	2,680	2,848	2,784	2,740	2,773	2,676	2,528	2,616
Speech pathology/audiology .....	1,269	1,216	1,447	1,274	1,205	1,244	1,373	1,330	1,501
Veterinary sciences .....	65	76	86	82	85	89	83	79	73
Clinical medicine, n.e.c. ....	501	456	477	454	497	517	531	547	708
Health related, n.e.c. ....	2,582	2,811	2,625	3,214	3,057	3,629	3,501	4,091	4,276

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table B-17. Science and engineering graduate students in all institutions, by field and citizenship, and racial/ethnic background of U.S. citizens: 1983-91**

Page 1 of 3

Field, citizenship, and racial/ethnic background	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
<b>Total, all surveyed fields</b>	<b>392,376</b>	<b>396,449</b>	<b>405,432</b>	<b>416,442</b>	<b>421,441</b>	<b>425,752</b>	<b>434,861</b>	<b>444,346</b>	<b>475,691</b>
Total U.S. citizens	318,939	321,215	325,416	329,067	329,261	328,240	332,629	338,339	362,621
Black, non-Hispanic	12,871	12,676	12,498	12,417	12,408	13,416	13,982	14,852	16,542
American Indian/Alaskan Native	1,101	981	874	886	945	1,102	1,057	1,238	1,448
Asian/Pacific Islander	10,325	11,147	12,997	13,850	15,709	16,457	17,068	18,561	20,201
Hispanic	10,329	10,068	10,159	10,184	10,468	10,919	11,231	11,905	13,407
White, non-Hispanic	260,449	259,821	259,977	265,116	265,727	267,404	269,339	275,445	291,631
Other or unknown	23,864	26,522	28,911	26,614	24,004	18,942	19,952	16,338	19,392
Non-U.S. citizens	73,437	75,234	80,016	87,375	92,180	97,512	102,232	106,007	113,070
<b>Sciences, total</b>	<b>257,204</b>	<b>257,975</b>	<b>263,394</b>	<b>266,907</b>	<b>269,873</b>	<b>273,662</b>	<b>280,372</b>	<b>287,969</b>	<b>300,833</b>
Total U.S. citizens	214,311	213,564	215,395	214,883	214,447	215,142	218,910	224,101	233,744
Black, non-Hispanic	9,587	9,264	9,125	8,998	9,021	9,696	10,161	10,837	11,662
American Indian/Alaskan Native	734	639	618	615	662	782	740	897	1,012
Asian/Pacific Islander	5,963	6,370	7,212	7,665	8,734	9,266	9,689	10,342	11,014
Hispanic	7,480	7,192	7,143	7,056	7,084	7,376	7,753	8,240	8,989
White, non-Hispanic	176,618	173,995	173,786	174,917	175,295	177,443	179,423	184,562	190,152
Other or unknown	13,949	16,104	17,511	15,632	13,651	10,579	11,144	9,223	10,915
Non-U.S. citizens	42,893	44,411	47,999	52,024	55,426	58,520	61,462	63,868	67,089
<b>Physical sciences</b>	<b>29,456</b>	<b>30,056</b>	<b>30,981</b>	<b>32,248</b>	<b>32,730</b>	<b>32,962</b>	<b>33,619</b>	<b>33,621</b>	<b>34,900</b>
Total U.S. citizens	21,795	22,009	22,040	22,220	22,102	21,850	21,807	21,291	22,126
Black, non-Hispanic	575	596	535	524	536	569	633	646	698
American Indian/Alaskan Native	45	77	35	48	46	52	44	60	82
Asian/Pacific Islander	748	891	937	912	1,047	1,213	1,136	1,159	1,398
Hispanic	563	535	599	629	591	624	680	630	657
White, non-Hispanic	18,647	18,567	18,324	18,553	18,090	18,282	18,320	18,181	18,543
Other or unknown	1,217	1,323	1,610	1,554	1,792	1,110	994	615	788
Non-U.S. citizens	7,661	8,047	8,941	10,028	10,628	11,112	11,812	12,330	12,774
<b>Earth, atmospheric, &amp; ocean sciences</b>	<b>15,590</b>	<b>15,655</b>	<b>15,591</b>	<b>15,210</b>	<b>14,522</b>	<b>14,040</b>	<b>13,849</b>	<b>14,105</b>	<b>14,747</b>
Total U.S. citizens	13,717	13,849	13,697	13,108	12,299	11,597	11,248	11,425	11,846
Black, non-Hispanic	114	115	128	100	95	112	98	124	147
American Indian/Alaskan Native	28	23	25	21	19	29	27	31	29
Asian/Pacific Islander	240	189	194	154	181	214	212	257	263
Hispanic	226	263	241	239	228	211	213	243	249
White, non-Hispanic	12,355	12,053	11,897	11,691	11,035	10,554	10,313	10,482	10,784
Other or unknown	754	1,206	1,212	903	741	477	385	288	374
Non-U.S. citizens	1,873	1,806	1,894	2,102	2,223	2,443	2,601	2,680	2,901
<b>Mathematical sciences</b>	<b>17,380</b>	<b>17,459</b>	<b>17,580</b>	<b>17,967</b>	<b>18,524</b>	<b>19,103</b>	<b>19,338</b>	<b>19,782</b>	<b>19,992</b>
Total U.S. citizens	12,426	12,266	12,235	12,157	12,395	12,678	12,653	13,229	13,367
Black, non-Hispanic	403	393	408	449	441	422	463	511	518
American Indian/Alaskan Native	31	22	22	31	48	32	34	20	20
Asian/Pacific Islander	564	565	622	706	769	756	709	822	865
Hispanic	330	292	262	270	266	328	305	351	349
White, non-Hispanic	10,260	9,959	9,798	9,528	9,650	10,153	10,135	10,842	10,483
Other or unknown	818	1,035	1,123	1,173	1,221	987	1,007	893	1,132
Non-U.S. citizens	4,954	5,193	5,345	5,810	6,129	6,425	6,685	6,553	6,625
<b>Computer sciences</b>	<b>23,616</b>	<b>25,810</b>	<b>29,844</b>	<b>31,397</b>	<b>32,137</b>	<b>32,554</b>	<b>32,598</b>	<b>34,373</b>	<b>34,728</b>
Total U.S. citizens	18,068	19,451	22,386	23,391	23,409	23,557	22,946	23,570	23,332
Black, non-Hispanic	564	561	609	686	750	825	836	961	1,087
American Indian/Alaskan Native	22	48	56	20	27	40	41	43	42
Asian/Pacific Islander	1,099	1,251	1,853	2,061	2,463	2,690	2,740	2,857	2,839
Hispanic	282	292	481	445	544	517	546	569	629
White, non-Hispanic	13,482	13,983	15,569	16,487	17,149	17,500	16,499	17,222	16,836
Other or unknown	2,619	3,316	3,818	3,692	2,476	1,985	2,284	1,918	2,099
Non-U.S. citizens	5,548	6,359	7,458	8,006	8,728	8,997	9,652	10,803	11,396
<b>Agricultural sciences</b>	<b>12,396</b>	<b>12,181</b>	<b>11,499</b>	<b>11,433</b>	<b>11,095</b>	<b>11,094</b>	<b>11,126</b>	<b>11,277</b>	<b>11,475</b>
Total U.S. citizens	9,673	9,514	8,870	8,651	8,193	8,178	8,206	8,091	8,258
Black, non-Hispanic	133	135	147	127	134	143	151	155	147
American Indian/Alaskan Native	33	26	21	24	28	31	24	19	32
Asian/Pacific Islander	134	141	137	130	166	213	232	237	219
Hispanic	224	253	322	301	222	276	293	275	279
White, non-Hispanic	8,745	8,695	7,829	7,760	7,413	7,286	7,270	7,237	7,426
Other or unknown	404	264	414	309	230	229	236	168	155
Non-U.S. citizens	2,723	2,667	2,629	2,782	2,902	2,916	2,920	3,186	3,217

See explanatory information, if any, and SOURCE(S) at end of table.

**Table B-17. Science and engineering graduate students in all institutions, by field and citizenship, and racial/ethnic background of U.S. citizens: 1983-91**

Page 2 of 3

Field, citizenship, and racial/ethnic background	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
<b>Biological sciences</b>	<b>45,771</b>	<b>45,892</b>	<b>46,276</b>	<b>46,912</b>	<b>47,138</b>	<b>47,989</b>	<b>49,257</b>	<b>49,483</b>	<b>52,120</b>
Total U.S. citizens	39,742	39,559	39,380	39,095	38,404	38,240	38,424	38,201	39,670
Black, non-Hispanic	1,161	1,158	1,183	1,088	1,058	1,156	1,215	1,212	1,319
American Indian/Alaskan Native	118	81	88	105	90	108	85	141	206
Asian/Pacific Islander	1,267	1,314	1,459	1,575	1,667	1,810	2,001	2,221	2,425
Hispanic	909	844	935	954	1,034	1,119	1,208	1,212	1,391
White, non-Hispanic	34,791	34,909	34,120	33,881	32,958	33,047	32,642	32,441	33,236
Other or unknown	1,496	1,253	1,595	1,492	1,599	1,000	1,273	974	1,093
Non-U.S. citizens	6,029	6,333	6,896	7,817	8,734	9,749	10,833	11,282	12,450
<b>Psychology</b>	<b>40,912</b>	<b>40,937</b>	<b>41,173</b>	<b>41,417</b>	<b>42,327</b>	<b>44,154</b>	<b>46,046</b>	<b>48,243</b>	<b>51,592</b>
Total U.S. citizens	39,479	39,550	39,676	39,913	40,810	42,494	44,393	48,416	49,594
Black, non-Hispanic	1,880	1,908	1,792	1,791	1,796	1,953	2,075	2,228	2,493
American Indian/Alaskan Native	135	116	135	134	152	178	181	235	253
Asian/Pacific Islander	531	544	559	619	727	749	821	966	1,046
Hispanic	1,812	1,901	1,612	1,708	1,658	1,722	1,753	2,152	2,432
White, non-Hispanic	32,576	32,037	32,631	33,177	34,547	35,938	37,589	39,214	41,155
Other or unknown	2,545	3,044	2,947	2,484	1,930	1,954	1,974	1,621	2,215
Non-U.S. citizens	1,433	1,387	1,497	1,504	1,517	1,660	1,653	1,827	1,998
<b>Social sciences</b>	<b>72,083</b>	<b>69,985</b>	<b>70,450</b>	<b>70,323</b>	<b>71,400</b>	<b>71,766</b>	<b>74,539</b>	<b>77,085</b>	<b>81,279</b>
Total U.S. citizens	59,411	57,366	57,111	56,348	56,835	56,548	59,233	61,878	65,551
Black, non-Hispanic	4,757	4,398	4,323	4,233	4,213	4,516	4,690	5,000	5,253
American Indian/Alaskan Native	322	246	236	232	252	312	304	348	368
Asian/Pacific Islander	1,380	1,475	1,451	1,508	1,714	1,621	1,838	1,823	1,959
Hispanic	3,114	2,812	2,691	2,510	2,541	2,579	2,755	2,808	3,003
White, non-Hispanic	45,742	43,772	43,618	43,840	44,453	44,683	46,655	49,143	51,889
Other or unknown	4,096	4,663	4,792	4,025	3,662	2,837	2,991	2,756	3,079
Non-U.S. citizens	12,672	12,619	13,339	13,975	14,565	15,218	15,306	15,207	15,728
<b>Engineering, total</b>	<b>91,111</b>	<b>92,780</b>	<b>96,160</b>	<b>102,140</b>	<b>103,889</b>	<b>103,159</b>	<b>104,319</b>	<b>107,329</b>	<b>114,407</b>
Total U.S. citizens	63,623	64,894	67,306	70,129	70,509	67,830	67,509	69,362	73,088
Black, non-Hispanic	1,393	1,460	1,409	1,473	1,422	1,520	1,639	1,798	2,034
American Indian/Alaskan Native	181	192	122	131	124	144	124	151	189
Asian/Pacific Islander	3,405	3,815	4,812	5,123	5,856	5,916	5,993	6,697	7,203
Hispanic	1,441	1,500	1,480	1,603	1,728	1,717	1,711	1,892	2,179
White, non-Hispanic	48,695	49,425	50,391	53,081	53,716	52,507	51,578	53,124	55,020
Other or unknown	8,508	8,502	9,092	8,718	7,663	6,026	6,464	5,700	6,463
Non-U.S. citizens	27,488	27,886	28,854	32,011	33,380	35,329	36,810	37,967	41,319
<b>Chemical engineering</b>	<b>7,563</b>	<b>7,373</b>	<b>7,150</b>	<b>7,012</b>	<b>7,026</b>	<b>6,618</b>	<b>6,460</b>	<b>6,675</b>	<b>7,127</b>
Total U.S. citizens	5,048	5,013	4,729	4,640	4,587	4,082	3,675	3,781	3,976
Black, non-Hispanic	68	73	71	85	87	84	79	84	119
American Indian/Alaskan Native	11	9	8	5	26	24	10	5	22
Asian/Pacific Islander	311	334	277	287	356	313	248	329	426
Hispanic	89	141	107	116	116	135	111	142	159
White, non-Hispanic	4,256	4,110	3,865	3,886	3,782	3,382	3,097	3,133	3,150
Other or unknown	293	348	401	261	220	144	130	88	100
Non-U.S. citizens	2,515	2,360	2,421	2,372	2,439	2,536	2,785	2,894	3,151
<b>Civil engineering</b>	<b>14,921</b>	<b>15,203</b>	<b>14,916</b>	<b>14,987</b>	<b>14,718</b>	<b>14,822</b>	<b>14,919</b>	<b>15,454</b>	<b>17,265</b>
Total U.S. citizens	9,689	9,920	9,526	9,294	9,120	9,007	9,081	9,566	10,775
Black, non-Hispanic	172	185	183	172	161	189	244	231	277
American Indian/Alaskan Native	23	19	16	28	9	22	22	37	34
Asian/Pacific Islander	443	424	437	444	583	601	597	780	830
Hispanic	268	284	251	252	264	263	275	302	382
White, non-Hispanic	7,571	7,640	7,336	7,264	7,088	7,377	7,344	7,666	8,617
Other or unknown	1,212	1,388	1,303	1,134	1,015	555	599	570	635
Non-U.S. citizens	5,232	5,283	5,390	5,693	5,598	5,815	5,838	5,888	6,490
<b>Electrical engineering</b>	<b>25,116</b>	<b>26,198</b>	<b>28,026</b>	<b>29,799</b>	<b>31,214</b>	<b>31,637</b>	<b>33,055</b>	<b>33,583</b>	<b>35,272</b>
Total U.S. citizens	17,537	18,658	19,620	20,285	21,123	21,497	21,935	22,060	22,536
Black, non-Hispanic	365	413	456	386	418	509	559	612	668
American Indian/Alaskan Native	48	46	30	43	18	39	37	48	40
Asian/Pacific Islander	1,171	1,480	1,968	2,059	2,440	2,568	2,684	3,048	3,104
Hispanic	394	423	443	464	519	524	554	576	663
White, non-Hispanic	12,107	12,591	13,470	13,868	14,783	15,267	15,679	15,800	15,833
Other or unknown	3,452	3,705	3,255	3,465	2,945	2,590	2,422	2,176	2,428
Non-U.S. citizens	7,579	7,540	8,406	9,514	10,091	10,340	11,120	11,523	12,736

See explanatory information, if any, and SOURCE(S) at end of table.



**Table B-17. Science and engineering graduate students in all institutions, by field and citizenship, and race/ethnic background of U.S. citizens: 1983-91**

Page 3 of 3

Field, citizenship, and racial/ethnic background	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
<b>Industrial engineering</b> .....	9,373	9,535	10,841	11,888	12,457	11,731	11,458	11,611	13,333
Total U.S. citizens .....	7,649	7,672	8,844	9,860	9,775	8,975	8,463	8,443	9,486
Black, non-Hispanic .....	321	322	256	299	286	292	280	308	396
American Indian/Alaskan Native .....	17	27	11	10	25	15	17	24	40
Asian/Pacific Islander .....	218	235	337	410	449	471	461	468	592
Hispanic .....	224	291	255	278	282	280	248	234	261
White, non-Hispanic .....	6,349	6,198	7,268	7,676	8,039	7,380	6,770	6,629	7,208
Other or unknown .....	520	599	717	987	694	557	687	780	969
Non-U.S. citizens .....	1,724	1,863	1,997	2,228	2,682	2,756	2,995	3,168	3,867
<b>Mechanical engineering</b> .....	12,911	13,855	14,157	15,713	16,278	16,207	16,239	16,455	17,820
Total U.S. citizens .....	8,313	8,308	9,370	10,329	10,793	10,173	10,436	10,496	11,144
Black, non-Hispanic .....	135	170	161	161	187	200	200	245	246
American Indian/Alaskan Native .....	19	30	25	15	23	12	13	15	21
Asian/Pacific Islander .....	425	494	794	811	883	777	803	773	942
Hispanic .....	125	125	181	243	282	217	214	282	371
White, non-Hispanic .....	6,788	7,167	7,159	7,864	7,922	7,875	7,620	8,077	8,431
Other or unknown .....	821	1,022	1,050	1,235	1,496	1,092	1,586	1,104	1,133
Non-U.S. citizens .....	4,598	4,847	4,787	5,384	5,485	6,034	5,803	5,959	6,676
<b>Other engineering</b> .....	21,227	20,616	21,070	22,741	22,196	21,944	22,188	23,551	23,590
Total U.S. citizens .....	15,387	14,623	15,217	15,921	15,111	14,096	13,919	15,016	15,191
Black, non-Hispanic .....	312	297	282	370	283	246	277	318	328
American Indian/Alaskan Native .....	63	61	32	30	23	32	25	22	32
Asian/Pacific Islander .....	837	848	1,001	1,112	1,145	1,186	1,200	1,319	1,309
Hispanic .....	341	236	243	250	265	298	309	356	343
White, non-Hispanic .....	11,624	11,719	11,293	12,523	12,102	11,246	11,068	12,019	11,981
Other or unknown .....	2,210	1,462	2,386	1,636	1,293	1,088	1,040	982	1,198
Non-U.S. citizens .....	5,840	5,993	5,853	6,820	7,085	7,848	8,269	8,535	8,399
<b>Total, health fields</b> .....	44,081	45,694	45,878	47,395	47,679	48,931	50,170	49,048	60,451
Total U.S. citizens .....	41,005	42,757	42,715	44,055	44,305	45,268	46,210	44,876	55,789
Black, non-Hispanic .....	1,891	1,952	1,964	1,946	1,965	2,200	2,182	2,217	2,846
American Indian/Alaskan Native .....	186	150	134	140	159	176	193	190	247
Asian/Pacific Islander .....	957	962	973	1,062	1,119	1,275	1,386	1,522	1,984
Hispanic .....	1,428	1,376	1,536	1,525	1,656	1,826	1,767	1,773	2,239
White, non-Hispanic .....	35,136	36,401	35,800	37,118	36,716	37,454	38,338	37,759	46,459
Other or unknown .....	1,407	1,916	2,308	2,284	2,690	2,337	2,344	1,415	2,014
Non-U.S. citizens .....	3,056	2,937	3,163	3,340	3,374	3,663	3,960	4,172	4,662

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table B-18. Full-time science and engineering graduate students in all institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all surveyed fields	252,846	254,735	258,241	267,075	271,772	276,225	283,849	288,981	308,669
Total, science/engineering fields	229,938	231,590	235,064	243,645	247,908	251,780	258,078	263,517	277,898
Engineering, total	53,931	55,157	55,938	60,227	61,885	63,187	64,546	65,692	71,230
Aerospace	1,840	1,854	1,994	2,154	2,372	2,533	2,772	3,010	3,314
Agricultural	766	773	767	881	924	879	851	793	825
Biomedical	1,031	1,121	1,129	1,294	1,392	1,455	1,611	1,781	1,921
Chemical	5,869	5,734	5,546	5,594	5,820	5,359	5,282	5,387	5,788
Civil	9,807	10,089	9,760	9,982	9,851	9,957	9,974	10,074	11,214
Electrical	13,203	13,857	14,752	16,222	17,040	17,653	18,396	18,567	19,988
Engineering science	1,356	1,272	1,264	1,445	1,373	1,418	1,259	1,243	1,364
Industrial	3,322	3,433	3,517	3,875	4,233	4,398	4,761	4,863	5,705
Mechanical	8,330	8,698	8,875	9,789	10,164	10,426	10,464	10,862	11,654
Metallurgical/materials	2,704	2,872	3,093	3,370	3,436	3,464	3,715	3,922	4,059
Mining	428	424	391	442	435	415	338	334	336
Nuclear	1,052	1,018	1,030	1,059	1,044	1,105	1,112	1,080	1,080
Petroleum	620	614	577	572	644	599	506	466	521
Engineering, n.e.c.	3,603	3,398	3,243	3,548	3,557	3,526	3,505	3,510	3,481
Sciences, total	176,007	176,433	179,126	183,418	186,023	188,593	193,532	197,825	206,668
Physical sciences	25,205	25,852	26,669	27,764	28,414	28,574	29,207	29,042	30,131
Astronomy	585	596	635	654	681	705	762	790	810
Chemistry	15,023	15,123	15,580	15,997	16,235	16,088	16,272	16,032	16,696
Physics	9,495	9,964	10,287	10,957	11,304	11,638	12,040	12,088	12,482
Physical sciences, n.e.c.	102	169	167	156	194	143	133	132	143
Earth, atmospheric, & ocean sciences	12,068	11,837	11,458	11,347	10,543	10,299	10,143	10,273	10,414
Atmospheric sciences	785	776	872	855	824	829	810	828	859
Geosciences	8,203	8,093	7,703	7,384	6,666	6,310	5,985	5,805	5,691
Oceanography	1,612	1,599	1,562	1,694	1,651	1,629	1,799	1,851	1,898
Earth, atmos., & ocean sci., n.e.c.	1,468	1,369	1,321	1,414	1,402	1,531	1,549	1,789	1,966
Mathematical sciences	10,957	11,311	11,818	12,390	13,044	13,514	13,695	13,834	14,259
Computer sciences	10,687	11,587	14,101	15,310	15,572	15,393	15,797	16,859	16,552
Agricultural sciences	9,926	9,851	9,191	9,314	9,063	9,072	9,001	9,052	9,238
Biological sciences	36,862	37,234	37,141	37,917	38,529	39,522	40,680	40,420	42,929
Anatomy	921	936	891	893	924	973	999	907	956
Biochemistry	3,978	4,235	4,463	4,640	4,614	4,743	4,822	4,807	4,967
Biology	9,001	8,965	8,530	8,557	8,874	8,865	9,318	9,201	9,594
Biometry/epidemiology	877	751	996	1,043	1,190	1,236	1,236	1,253	1,446
Biophysics	437	419	381	449	468	544	610	572	645
Botany	2,914	2,863	2,717	2,763	2,596	2,556	2,456	2,214	2,276
Cell biology	1,138	1,209	1,406	1,855	1,866	2,023	2,177	2,359	2,711
Ecology	844	877	876	857	796	836	879	890	936
Entomology/parasitology	1,305	1,264	1,138	1,107	1,062	1,061	1,009	997	1,014
Genetics	964	983	1,057	1,171	1,208	1,187	1,254	1,223	1,416
Microbiology	3,704	3,826	3,879	3,871	4,017	4,309	4,329	4,289	4,409
Nutrition	2,988	3,018	3,040	3,055	3,014	2,876	2,874	2,918	2,959
Pathology	1,056	1,070	1,027	1,055	1,093	1,109	1,149	1,125	1,168
Pharmacology	1,933	1,926	1,993	1,958	1,927	1,992	2,140	2,154	2,308
Physiology	1,766	1,969	1,986	2,005	1,996	2,008	2,057	2,116	2,160
Zoology	2,052	1,863	1,718	1,720	1,787	1,719	1,774	1,618	1,784
Biosciences, n.e.c.	984	1,057	1,043	1,113	1,277	1,485	1,597	1,777	2,182
Psychology	26,693	26,102	25,751	26,469	27,308	28,366	29,608	30,694	32,382
Social sciences	43,609	42,859	42,997	42,907	43,550	43,853	45,401	47,851	50,763
Agricultural economics	2,047	2,027	1,980	1,964	1,857	1,909	1,912	1,961	2,003
Anthropology	3,940	3,968	3,916	4,061	4,088	4,276	4,411	4,787	5,036
Economics (except agricultural)	9,143	8,771	8,938	8,959	8,985	9,021	9,088	9,216	9,730
Geography	2,202	2,175	2,124	2,108	2,290	2,215	2,356	2,380	2,574
History and philosophy of science	229	243	227	237	267	268	303	340	340
Linguistics	2,375	2,319	2,337	2,358	2,449	2,519	2,465	2,506	2,597
Political science	13,443	12,798	13,171	13,410	13,007	13,277	14,013	14,822	16,126
Sociology	4,794	4,745	4,644	4,572	5,026	5,082	5,269	5,668	5,848
Sociology/anthropology	671	606	565	584	560	568	633	768	687
Social sciences, n.e.c.	4,765	5,007	5,085	4,854	5,023	4,722	4,949	5,403	5,824
Total, health fields	22,908	23,145	23,177	23,430	23,864	24,445	25,771	25,464	30,771
Dentistry	701	772	746	816	901	923	850	812	889
Neurology	258	313	334	372	475	590	711	780	978
Nursing	6,204	6,113	5,813	5,634	5,659	5,508	5,331	3,901	6,492
Pharmaceutical sciences	1,768	1,771	1,789	1,841	1,824	1,907	2,117	1,996	2,272
Preventive medicine/community health	3,961	3,955	4,133	4,083	4,143	4,225	4,215	4,505	4,500
Speech pathology/audiology	5,255	5,265	5,446	5,391	4,994	5,247	5,640	5,738	6,646
Veterinary sciences	363	425	515	506	592	606	668	709	717
Clinical medicine, n.e.c.	1,072	1,030	1,145	1,127	1,171	1,233	1,386	1,402	1,612
Health related, n.e.c.	3,328	3,501	3,456	3,660	4,105	4,206	4,853	5,621	6,665

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table B-19. Full-time science and engineering graduate students in all institutions, by geographic distribution: 1983-91**

Page 1 of 1

Geographic distribution	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all institutions .....	252,846	254,735	258,241	267,075	271,772	276,225	283,849	288,981	308,669
New England .....	19,577	19,312	19,796	20,653	20,477	21,683	21,850	21,724	23,574
Connecticut .....	3,726	3,429	3,651	3,667	3,811	3,990	4,003	4,031	4,085
Maine .....	412	462	405	421	445	504	505	524	592
Massachusetts .....	12,881	12,823	13,186	13,885	13,437	14,404	14,423	14,179	15,782
New Hampshire .....	667	693	701	743	748	814	790	889	951
Rhode Island .....	1,445	1,478	1,434	1,524	1,625	1,501	1,622	1,558	1,632
Vermont .....	468	427	419	413	411	470	507	543	532
Middle Atlantic .....	37,174	36,912	37,344	39,008	39,573	42,021	43,164	43,108	45,781
New Jersey .....	4,095	4,569	4,750	5,098	5,555	5,575	5,767	5,409	5,662
New York .....	22,082	21,817	21,896	23,086	23,058	24,573	24,691	24,868	26,121
Pennsylvania .....	10,997	10,526	10,698	10,824	10,960	11,873	12,706	12,831	13,998
East North Central .....	47,318	45,320	48,402	48,086	50,314	52,994	54,746	55,018	58,800
Illinois .....	13,285	12,898	13,354	14,197	14,882	15,749	16,082	16,159	16,819
Indiana .....	6,002	5,948	5,881	6,143	6,499	6,878	7,353	7,603	7,925
Michigan .....	9,268	9,354	9,438	9,762	9,912	10,037	10,699	10,788	11,244
Ohio .....	12,358	11,117	11,803	12,030	12,948	13,719	13,781	13,544	15,486
Wisconsin .....	6,405	6,003	5,926	5,954	6,073	6,611	6,831	6,926	7,326
West North Central .....	18,928	17,683	17,231	17,624	17,721	18,811	19,021	19,550	20,731
Iowa .....	3,851	3,658	3,777	3,853	3,860	4,108	4,187	4,380	4,547
Kansas .....	3,783	3,126	2,405	2,445	2,484	2,711	2,907	2,943	3,088
Minnesota .....	4,571	4,433	4,600	4,661	4,560	5,128	5,165	5,192	5,355
Missouri .....	3,889	3,677	3,690	3,920	4,007	4,000	3,925	4,067	4,474
Nebraska .....	1,472	1,472	1,409	1,347	1,460	1,475	1,436	1,521	1,661
North Dakota .....	779	726	788	811	787	803	782	755	757
South Dakota .....	583	591	582	587	583	586	619	692	851
South Atlantic .....	33,017	33,021	33,907	35,544	35,929	38,402	39,830	41,548	44,756
Delaware .....	776	699	762	800	857	844	897	945	1,076
District of Columbia .....	3,050	3,088	3,468	3,484	3,505	3,731	3,456	3,629	3,830
Florida .....	5,934	6,027	6,364	6,450	6,230	6,903	7,222	7,364	8,147
Georgia .....	4,580	4,805	4,489	4,788	4,904	5,196	5,330	5,697	6,239
Maryland .....	4,084	3,889	4,003	4,329	4,391	4,856	5,242	5,462	5,821
North Carolina .....	6,259	6,130	6,091	6,504	6,538	7,159	7,476	7,657	8,069
South Carolina .....	2,111	2,062	2,125	2,307	2,301	2,281	2,490	2,470	2,874
Virginia .....	4,955	5,118	5,451	5,749	6,212	6,408	6,613	7,092	7,396
West Virginia .....	1,268	1,203	1,154	1,135	991	1,024	1,104	1,232	1,304
East South Central .....	9,822	9,776	9,834	10,243	10,468	11,453	12,208	11,710	12,930
Alabama .....	2,573	2,704	2,942	3,213	3,367	3,617	3,919	3,521	4,056
Kentucky .....	2,210	1,966	1,875	1,853	1,914	2,331	2,458	2,299	2,611
Mississippi .....	1,740	1,800	1,716	1,890	1,871	1,955	2,029	2,113	2,221
Tennessee .....	3,299	3,306	3,301	3,287	3,314	3,550	3,802	3,777	4,042
West South Central .....	23,933	23,610	23,085	23,687	23,596	24,252	25,451	26,418	28,628
Arkansas .....	1,086	825	783	786	715	902	1,047	1,215	1,249
Louisiana .....	3,321	3,805	3,638	3,591	3,655	3,715	3,718	3,931	4,440
Oklahoma .....	2,925	2,921	2,558	2,617	2,434	2,363	2,294	2,566	2,581
Texas .....	16,599	16,259	16,106	16,693	16,792	17,272	18,392	18,706	20,358
Mountain .....	17,080	16,453	16,510	17,341	17,916	18,025	17,768	18,510	20,247
Arizona .....	4,280	4,328	4,568	4,853	4,778	5,192	5,113	5,056	5,308
Colorado .....	4,991	4,784	4,771	5,219	5,655	5,427	5,053	5,724	6,052
Idaho .....	653	599	561	583	661	657	714	793	840
Montana .....	1,014	995	916	859	832	899	894	906	950
Nevada .....	557	432	438	420	503	543	686	587	939
New Mexico .....	1,913	1,790	1,874	1,939	2,099	1,990	1,914	2,089	2,219
Utah .....	2,878	2,889	2,860	2,984	2,820	2,788	2,784	2,781	3,148
Wyoming .....	794	856	522	484	568	549	630	574	791
Pacific .....	44,486	41,512	42,807	43,490	44,505	47,113	48,244	49,668	51,107
Alaska .....	374	345	212	302	223	267	390	378	381
California .....	35,252	32,789	33,989	34,406	35,655	37,531	38,546	39,638	40,259
Hawaii .....	1,502	1,460	1,467	1,570	1,527	1,522	1,539	1,655	1,767
Oregon .....	2,702	2,633	2,705	2,864	2,830	2,934	2,898	2,936	3,315
Washington .....	4,856	4,285	4,434	4,348	4,270	4,859	4,871	5,061	5,365
Outlying areas .....	1,511	1,706	1,777	1,733	1,491	1,471	1,547	1,727	2,115
State unknown 2/ .....	0	9,430	9,548	9,668	9,764	0	0	0	0

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

2/ These numbers represent the total of all nonsampled master's-granting institutions.

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table B-20. Male full-time science and engineering graduate students in all institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all surveyed fields .....	168,630	169,534	171,680	177,260	180,005	180,472	183,742	185,454	194,125
Total, science/engineering fields .....	161,815	162,725	184,804	170,382	172,555	173,075	175,791	177,401	185,254
Engineering, total .....	48,320	49,113	49,654	53,254	54,601	55,543	56,370	57,002	61,479
Aerospace .....	1,760	1,768	1,868	2,006	2,205	2,365	2,592	2,811	3,060
Agricultural .....	708	706	709	820	839	807	782	710	716
Biomedical .....	804	874	884	996	1,046	1,080	1,221	1,327	1,423
Chemical .....	5,100	5,002	4,792	4,806	4,750	4,567	4,486	4,493	4,800
Civil .....	8,512	8,651	8,286	8,491	8,247	8,389	8,322	8,294	9,173
Electrical .....	12,248	12,711	13,553	14,765	15,498	15,979	16,582	16,622	17,816
Engineering science .....	1,221	1,127	1,148	1,293	1,246	1,290	1,120	1,070	1,182
Industrial .....	2,703	2,803	2,870	3,127	3,480	3,642	3,835	3,934	4,646
Mechanical .....	7,847	8,137	8,316	9,162	9,440	9,591	9,609	9,824	10,708
Metallurgical/materials .....	2,380	2,518	2,654	2,849	2,867	2,885	3,077	3,229	3,315
Mining .....	387	383	363	407	400	373	298	287	304
Nuclear .....	978	948	939	960	940	1,004	993	952	935
Petroleum .....	557	562	530	534	601	568	486	444	483
Engineering, n.e.c. ....	3,115	2,923	2,764	3,038	3,042	3,003	2,967	3,005	2,918
Sciences, total .....	113,495	113,612	115,150	117,128	117,954	117,532	119,421	120,399	123,775
Physical sciences .....	20,371	20,755	21,241	22,023	22,384	22,208	22,547	22,341	22,869
Astronomy .....	500	501	531	538	566	589	626	629	641
Chemistry .....	11,344	11,299	11,592	11,796	11,849	11,433	11,419	11,180	11,383
Physics .....	8,458	8,857	9,002	9,594	9,861	10,119	10,425	10,457	10,767
Physical sciences, n.e.c. ....	69	98	116	95	108	87	77	75	78
Earth, atmospheric, & ocean sciences .....	9,054	8,942	8,587	8,405	7,826	7,510	7,349	7,346	7,241
Atmospheric sciences .....	667	655	733	694	676	682	648	653	682
Geosciences .....	6,249	6,168	5,842	5,610	5,074	4,779	4,549	4,380	4,154
Oceanography .....	1,162	1,150	1,114	1,169	1,159	1,104	1,220	1,248	1,257
Earth, atmos. & ocean sci., n.e.c. ....	976	969	898	932	917	945	932	1,065	1,148
Mathematical sciences .....	8,039	8,327	8,612	8,995	9,489	9,803	9,762	9,800	10,048
Computer sciences .....	8,038	8,825	11,009	11,931	12,203	12,009	12,516	13,352	13,016
Agricultural sciences .....	7,413	7,278	6,800	6,920	6,681	6,604	6,496	6,408	6,365
Biological sciences .....	22,042	22,095	21,891	22,065	22,271	22,616	22,962	22,533	23,653
Anatomy .....	558	555	509	514	529	549	558	499	504
Biochemistry .....	2,516	2,657	2,808	2,849	2,813	2,841	2,901	2,846	2,925
Biology .....	5,412	5,379	5,077	5,047	5,148	5,179	5,355	5,267	5,323
Biometry/epidemiology .....	424	353	458	485	563	575	554	599	648
Biophysics .....	328	314	287	337	355	406	464	430	483
Botany .....	1,859	1,814	1,717	1,768	1,600	1,581	1,509	1,355	1,375
Cell biology .....	748	758	895	1,009	1,155	1,201	1,259	1,312	1,476
Ecology .....	557	586	561	544	502	523	536	541	541
Entomology/parasitology .....	969	942	853	808	776	752	693	694	720
Genetics .....	487	517	567	618	620	610	625	600	713
Microbiology .....	2,124	2,175	2,224	2,186	2,245	2,401	2,358	2,271	2,338
Nutrition .....	1,060	1,072	1,119	1,107	1,089	991	991	1,005	1,041
Pathology .....	658	660	625	635	647	675	703	660	695
Pharmacology .....	1,243	1,202	1,237	1,194	1,140	1,186	1,219	1,205	1,229
Physiology .....	1,152	1,271	1,245	1,247	1,253	1,248	1,234	1,250	1,290
Zoology .....	1,370	1,213	1,112	1,088	1,116	1,044	1,090	967	1,075
Biosciences, n.e.c. ....	577	629	597	629	720	856	913	1,012	1,277
Psychology .....	11,401	10,754	10,351	10,317	10,411	10,286	10,550	10,680	10,873
Social sciences .....	27,137	26,636	26,659	26,472	26,689	26,496	27,239	27,939	29,710
Agricultural economics .....	1,621	1,610	1,554	1,537	1,429	1,449	1,419	1,442	1,478
Anthropology .....	1,728	1,803	1,789	1,795	1,826	1,856	1,880	2,039	2,096
Economics (except agricultural) .....	7,028	6,778	6,881	6,895	6,880	6,836	6,794	6,790	7,068
Geography .....	1,491	1,496	1,433	1,452	1,546	1,485	1,567	1,589	1,691
History and philosophy of science .....	145	166	155	150	184	169	191	220	212
Linguistics .....	1,025	972	981	1,016	1,033	1,060	1,075	1,113	1,184
Political science .....	8,805	8,543	8,565	8,628	8,470	8,407	8,716	8,812	9,726
Sociology .....	2,330	2,278	2,268	2,136	2,350	2,388	2,508	2,642	2,742
Sociology/anthropology .....	317	305	271	274	278	269	297	317	313
Social sciences, n.e.c. ....	2,647	2,685	2,762	2,589	2,693	2,577	2,792	2,975	3,200
Total, health fields .....	6,815	6,809	6,876	6,878	7,450	7,397	7,951	8,053	8,871
Dentistry .....	552	611	584	636	665	680	618	581	631
Neurology .....	108	205	205	231	296	356	425	439	563
Nursing .....	358	357	290	314	511	331	391	264	486
Pharmaceutical sciences .....	1,210	1,177	1,186	1,184	1,131	1,156	1,278	1,219	1,340
Preventive medicine/community health .....	1,791	1,674	1,733	1,816	1,959	1,843	1,693	1,859	1,834
Speech pathology/audiology .....	724	680	733	607	498	570	571	534	534
Veterinary sciences .....	226	285	330	327	374	379	400	415	436
Clinical medicine, n.e.c. ....	607	559	587	579	635	683	779	811	900
Health related, n.e.c. ....	1,161	1,281	1,228	1,184	1,381	1,399	1,796	1,931	2,147

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



Table B-21. Female full-time science and engineering graduate students in all institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all surveyed fields .....	84,216	85,201	86,561	89,815	91,787	95,753	100,107	103,527	114,544
Total, science/engineering fields .....	68,123	68,865	70,260	73,263	75,353	78,705	82,287	86,116	92,644
Engineering, total .....	5,611	6,044	6,284	6,973	7,284	7,644	8,176	8,690	9,751
Aerospace .....	80	86	126	146	167	168	180	199	254
Agricultural .....	58	67	58	61	85	72	69	83	109
Biomedical .....	227	247	245	298	346	375	390	454	498
Chemical .....	769	732	754	788	870	792	796	894	988
Civil .....	1,295	1,438	1,494	1,491	1,404	1,568	1,652	1,780	2,041
Electrical .....	955	1,146	1,199	1,457	1,542	1,674	1,814	1,945	2,172
Engineering science .....	135	145	118	152	127	128	139	173	182
Industrial .....	619	630	647	748	753	756	926	929	1,059
Mechanical .....	483	561	559	627	724	835	855	838	946
Metallurgical/materials .....	324	354	439	521	569	579	638	693	744
Mining .....	41	41	28	35	35	42	40	47	32
Nuclear .....	74	70	91	99	104	101	119	128	145
Petroleum .....	63	52	47	38	43	31	20	22	38
Engineering, n.e.c. ....	488	475	479	510	515	523	538	505	543
Sciences, total .....	62,512	62,821	63,976	66,290	66,069	71,061	74,111	77,426	82,893
Physical sciences .....	4,834	5,097	5,428	5,741	6,030	6,366	6,660	6,701	7,262
Astronomy .....	85	95	104	116	115	136	136	161	169
Chemistry .....	3,679	3,824	3,988	4,201	4,386	4,655	4,853	4,852	5,313
Physics .....	1,037	1,107	1,285	1,363	1,443	1,519	1,615	1,631	1,715
Physical sciences, n.e.c. ....	33	71	51	61	86	56	56	57	65
Earth, atmospheric, & ocean sciences .....	3,014	2,895	2,871	2,942	2,717	2,789	2,794	2,927	3,173
Atmospheric sciences .....	118	121	139	161	148	147	162	175	177
Geosciences .....	1,954	1,925	1,861	1,774	1,592	1,531	1,436	1,425	1,537
Oceanography .....	450	449	448	525	492	525	579	603	641
Earth, atmos., & ocean sci., n.e.c. ....	492	400	423	482	485	586	617	724	818
Mathematical sciences .....	2,918	2,984	3,206	3,395	3,555	3,711	3,933	4,034	4,211
Computer sciences .....	2,649	2,762	3,092	3,379	3,369	3,384	3,281	3,507	3,536
Agricultural sciences .....	2,513	2,573	2,391	2,394	2,382	2,468	2,505	2,644	2,873
Biological sciences .....	14,820	15,139	15,250	15,852	16,258	16,906	17,718	17,887	19,276
Anatomy .....	363	381	382	379	395	424	441	408	452
Biochemistry .....	1,462	1,578	1,655	1,791	1,801	1,902	1,921	1,961	2,042
Biology .....	3,589	3,586	3,453	3,510	3,526	3,686	3,963	3,914	4,271
Biometry/epidemiology .....	453	398	538	563	627	661	682	654	798
Biophysics .....	109	105	94	112	113	138	146	142	162
Botany .....	1,055	1,049	1,000	995	996	975	947	659	901
Cell biology .....	390	453	511	646	731	822	918	1,047	1,235
Ecology .....	287	291	315	313	294	313	343	349	395
Entomology/parasitology .....	336	322	285	299	286	309	316	303	294
Genetics .....	477	469	490	553	588	577	629	623	703
Microbiology .....	1,580	1,651	1,655	1,685	1,772	1,908	1,971	2,018	2,071
Nutrition .....	1,928	1,946	1,921	1,948	1,925	1,885	1,883	1,913	1,918
Pathology .....	398	410	402	420	446	434	446	465	471
Pharmacology .....	690	724	756	764	787	806	921	949	1,079
Physiology .....	614	698	741	758	743	762	823	866	870
Zoology .....	682	650	606	632	671	675	684	651	709
Biosciences, n.e.c. ....	407	428	446	484	557	629	684	765	905
Psychology .....	15,292	15,348	15,400	16,152	16,897	18,080	19,056	20,014	21,509
Social sciences .....	16,472	16,023	16,338	16,435	16,861	17,357	18,162	19,712	21,053
Agricultural economics .....	426	417	436	427	428	460	493	519	525
Anthropology .....	2,212	2,165	2,127	2,266	2,260	2,420	2,531	2,748	2,940
Economics (except agricultural) .....	2,115	1,993	2,057	2,064	2,105	2,185	2,294	2,426	2,662
Geography .....	711	679	691	656	744	730	791	791	883
History and philosophy of science .....	84	77	72	87	83	97	112	120	128
Linguistics .....	1,350	1,347	1,356	1,342	1,416	1,459	1,390	1,393	1,413
Political science .....	4,638	4,255	4,606	4,782	4,537	4,870	5,297	5,810	6,400
Sociology .....	2,464	2,467	2,376	2,436	2,676	2,694	2,761	3,026	3,104
Sociology/anthropology .....	354	301	294	310	282	297	336	451	374
Social sciences, n.e.c. ....	2,118	2,322	2,323	2,065	2,330	2,145	2,157	2,428	2,624
Total, health fields .....	16,093	16,336	16,301	16,552	16,414	17,048	17,820	17,411	21,900
Dentistry .....	149	161	162	180	236	243	232	231	258
Neurology .....	72	108	129	141	179	234	286	341	415
Nursing .....	5,846	5,756	5,323	5,320	5,148	5,177	4,940	3,637	6,006
Pharmaceutical sciences .....	556	594	603	657	693	751	839	777	932
Preventive medicine/community health .....	2,170	2,281	2,400	2,267	2,184	2,382	2,522	2,646	2,666
Speech pathology/audiology .....	4,531	4,585	4,713	4,784	4,496	4,677	5,069	5,204	6,112
Veterinary sciences .....	137	160	185	179	218	227	268	294	281
Clinical medicine, n.e.c. ....	465	471	558	548	536	550	607	591	712
Health related, n.e.c. ....	2,165	2,220	2,228	2,476	2,724	2,807	3,057	3,690	4,518

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates In Science and Engineering

Table B-22. Full-time science and engineering graduate students in public institutions, by field: 1983-81

Page 1 of 1

Field	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all surveyed fields .....	181,316	183,635	184,005	190,920	194,947	198,006	203,601	206,772	222,106
Total, science/engineering fields .....	184,217	186,170	186,667	173,275	176,782	179,280	183,811	187,556	198,633
Engineering, total .....	37,435	38,293	38,927	42,409	44,388	45,534	46,588	47,432	52,202
Aerospace .....	1,346	1,341	1,471	1,635	1,807	1,932	2,125	2,340	2,609
Agricultural .....	713	719	714	830	876	834	801	745	785
Biomedical .....	580	639	657	801	910	934	1,001	1,070	1,136
Chemical .....	3,965	3,909	3,781	3,904	3,948	3,727	3,706	3,828	4,190
Civil .....	7,203	7,411	7,170	7,323	7,467	7,795	7,625	7,701	8,609
Electrical .....	8,567	8,975	9,604	10,912	11,636	12,172	12,743	12,922	14,179
Engineering science .....	779	646	605	671	626	617	520	518	653
Industrial .....	2,512	2,639	2,800	3,050	3,191	3,333	3,681	3,740	4,527
Mechanical .....	5,651	6,149	6,390	7,057	7,490	7,670	7,687	7,771	8,644
Metallurgical/materials .....	1,674	1,796	1,921	2,126	2,210	2,180	2,425	2,613	2,810
Mining .....	367	361	331	377	369	351	283	292	290
Nuclear .....	822	796	820	853	841	900	906	886	899
Petroleum .....	435	450	430	454	516	472	418	368	414
Engineering, n.e.c. ....	2,621	2,462	2,233	2,416	2,501	2,617	2,667	2,638	2,457
Sciences, total .....	126,782	127,877	127,740	130,866	132,394	133,746	137,223	140,124	146,431
Physical sciences .....	18,198	18,567	18,995	20,091	20,494	20,621	21,050	20,850	21,781
Astronomy .....	388	394	410	438	455	470	494	518	529
Chemistry .....	11,131	11,142	11,342	11,765	11,895	11,812	11,940	11,630	12,160
Physics .....	6,577	6,862	7,099	7,754	7,993	8,218	8,484	8,571	8,950
Physical sciences, n.e.c. ....	102	169	144	134	151	121	132	131	142
Earth, atmospheric, & ocean sciences .....	10,011	9,854	9,453	9,358	8,737	8,491	8,319	8,467	8,528
Atmospheric sciences .....	743	750	819	820	806	815	799	817	851
Geosciences .....	6,674	6,536	6,191	5,915	5,328	5,016	4,737	4,586	4,479
Oceanography .....	1,348	1,345	1,257	1,369	1,395	1,408	1,505	1,553	1,597
Earth, atmos., & ocean sci., n.e.c. ....	1,248	1,223	1,186	1,254	1,208	1,252	1,278	1,511	1,601
Mathematical sciences .....	8,162	8,528	8,900	9,468	10,120	10,491	10,687	10,997	11,268
Computer sciences .....	7,697	8,366	9,800	10,510	10,531	10,464	10,625	11,452	11,526
Agricultural sciences .....	9,498	9,446	8,800	8,918	8,687	8,670	8,593	8,583	8,748
Biological sciences .....	27,619	27,963	27,602	28,164	28,453	29,084	29,868	29,440	31,188
Anatomy .....	621	616	585	580	602	658	691	646	684
Biochemistry .....	2,701	2,892	3,088	3,214	3,157	3,269	3,275	3,289	3,381
Biology .....	6,480	6,423	6,148	6,162	6,251	6,298	6,667	6,600	6,937
Biometry/epidemiology .....	468	494	527	578	651	699	738	738	912
Biophysics .....	233	209	204	220	238	297	339	291	340
Botany .....	2,774	2,755	2,601	2,631	2,458	2,411	2,318	2,090	2,145
Cell biology .....	592	676	726	862	1,002	1,125	1,203	1,296	1,518
Ecology .....	785	816	825	804	746	780	800	827	826
Entomology/parasitology .....	1,257	1,210	1,087	1,057	995	1,000	944	931	947
Genetics .....	685	698	752	871	906	856	892	880	1,024
Microbiology .....	2,766	2,857	2,915	2,899	3,019	3,252	3,221	3,187	3,192
Nutrition .....	2,350	2,383	2,401	2,455	2,441	2,342	2,404	2,464	2,503
Pathology .....	723	720	698	730	802	787	813	777	818
Pharmacology .....	1,287	1,311	1,342	1,335	1,335	1,382	1,445	1,490	1,574
Physiology .....	1,242	1,345	1,336	1,328	1,319	1,321	1,399	1,407	1,388
Zoology .....	1,915	1,761	1,614	1,622	1,695	1,625	1,661	1,502	1,654
Biosciences, n.e.c. ....	740	797	752	816	836	982	1,058	1,025	1,345
Psychology .....	16,350	16,229	15,942	16,217	16,507	17,157	17,600	17,947	18,924
Social sciences .....	29,247	28,924	28,248	28,140	28,865	28,768	30,481	32,388	34,468
Agricultural economics .....	1,958	1,925	1,892	1,888	1,779	1,801	1,801	1,846	1,888
Anthropology .....	2,737	2,795	2,759	2,759	2,838	2,961	3,072	3,300	3,536
Economics (except agricultural) .....	5,947	5,662	5,735	5,700	5,713	5,685	5,726	5,805	6,299
Geography .....	2,009	1,991	1,931	1,945	2,134	2,047	2,192	2,211	2,404
History and philosophy of science .....	121	126	111	112	115	130	148	180	176
Linguistics .....	1,637	1,610	1,487	1,530	1,606	1,635	1,648	1,702	1,768
Political science .....	7,747	7,484	7,152	7,259	7,356	7,595	8,330	8,981	9,559
Sociology .....	3,456	3,519	3,350	3,347	3,697	3,677	3,828	4,163	4,363
Sociology/anthropology .....	412	411	396	419	421	436	475	583	492
Social sciences, n.e.c. ....	3,223	3,381	3,435	3,181	3,206	2,801	3,261	3,617	3,983
Total, health fields .....	17,099	17,465	17,338	17,645	18,165	18,726	19,790	19,216	23,473
Dentistry .....	500	561	515	605	704	721	654	649	697
Neurology .....	146	180	202	234	293	370	398	412	507
Nursing .....	4,619	4,575	4,116	4,303	4,480	4,539	4,337	2,891	5,118
Pharmaceutical sciences .....	1,524	1,521	1,525	1,559	1,532	1,588	1,779	1,622	1,851
Preventive medicine/community health .....	2,714	2,776	2,926	2,888	2,920	2,998	3,026	3,352	3,256
Speech pathology/audiology .....	4,414	4,488	4,527	4,581	4,295	4,516	4,802	5,033	5,775
Veterinary sciences .....	298	352	432	427	510	517	585	638	652
Clinical medicine, n.e.c. ....	740	731	806	818	818	887	957	945	1,046
Health related, n.e.c. ....	2,144	2,281	2,289	2,250	2,613	2,610	3,252	3,674	4,571

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



Table B-23. Full-time science and engineering graduate students in private institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all surveyed fields	71,530	71,100	74,236	76,155	76,825	78,219	80,248	82,209	86,563
Total, science/engineering fields	65,721	65,420	68,397	70,370	71,126	72,500	74,267	75,961	79,265
Engineering, total	16,496	16,864	17,011	17,818	17,497	17,653	17,958	18,260	19,028
Aerospace	494	513	523	519	565	601	647	670	705
Agricultural	53	54	53	51	48	45	50	48	40
Biomedical	451	482	472	493	482	521	610	711	785
Chemical	1,904	1,825	1,765	1,690	1,672	1,632	1,576	1,559	1,598
Civil	2,604	2,678	2,590	2,659	2,184	2,162	2,349	2,373	2,605
Electrical	4,636	4,882	5,148	5,310	5,404	5,481	5,653	5,645	5,809
Engineering science	577	626	659	774	747	801	739	725	711
Industrial	810	794	717	825	1,042	1,065	1,080	1,123	1,178
Mechanical	2,479	2,549	2,485	2,732	2,674	2,756	2,777	2,891	3,010
Metallurgical/materials	1,030	1,076	1,172	1,244	1,226	1,284	1,290	1,309	1,249
Mining	61	63	60	65	88	64	55	42	48
Nuclear	230	222	210	206	203	205	206	194	181
Petroleum	185	184	147	118	128	127	88	98	107
Engineering, n.e.c.	982	936	1,010	1,132	1,056	909	838	872	1,004
Sciences, total	49,225	48,556	51,386	52,552	53,629	54,847	56,309	57,701	60,237
Physical sciences	7,007	7,285	7,674	7,673	7,920	7,953	8,157	8,192	8,350
Astronomy	197	202	225	216	226	235	268	272	281
Chemistry	3,892	3,981	4,238	4,232	4,340	4,276	4,332	4,402	4,536
Physics	2,918	3,102	3,188	3,203	3,311	3,420	3,556	3,517	3,532
Physical sciences, n.e.c.	0	0	23	22	43	22	1	1	1
Earth, atmospheric, & ocean sciences	2,057	1,983	2,005	1,989	1,806	1,808	1,824	1,806	1,886
Atmospheric sciences	42	26	53	35	18	14	11	11	8
Geosciences	1,529	1,557	1,512	1,469	1,338	1,294	1,248	1,219	1,212
Oceanography	264	254	305	325	256	221	294	298	301
Earth, atmos., & ocean sci., n.e.c.	222	146	135	160	194	279	271	278	365
Mathematical sciences	2,795	2,783	2,918	2,922	2,924	3,023	3,008	2,837	2,991
Computer sciences	2,990	3,221	4,301	4,800	5,041	4,929	5,172	5,407	5,026
Agricultural sciences	428	405	391	396	376	402	408	469	490
Biological sciences	9,243	9,271	9,539	9,753	10,076	10,438	10,812	10,980	11,741
Anatomy	300	320	306	313	322	315	308	261	272
Biochemistry	1,277	1,343	1,375	1,426	1,457	1,474	1,547	1,518	1,586
Biology	2,521	2,542	2,382	2,395	2,423	2,567	2,651	2,601	2,657
Biometry/epidemiology	409	257	469	470	539	537	498	515	534
Biophysics	204	210	177	229	230	247	271	281	305
Botany	140	108	116	132	138	145	138	124	131
Cell biology	546	533	680	793	884	898	974	1,063	1,193
Ecology	59	61	51	53	50	56	79	63	110
Entomology/parasitology	48	54	51	50	67	61	65	66	67
Genetics	279	288	305	300	302	331	362	343	392
Microbiology	938	969	963	972	998	1,057	1,108	1,102	1,217
Nutrition	638	635	639	600	573	534	470	454	456
Pathology	333	350	329	325	291	322	336	348	348
Pharmacology	646	615	651	623	592	610	695	664	734
Physiology	524	624	650	677	677	687	658	709	772
Zoology	137	102	104	98	92	94	113	116	130
Biosciences, n.e.c.	244	260	291	297	441	503	539	752	837
Psychology	10,343	9,873	9,809	10,252	10,601	11,209	12,008	12,747	13,458
Social sciences	14,362	13,735	14,749	14,767	14,685	15,085	14,920	15,263	16,295
Agricultural economics	89	102	98	76	78	108	111	115	115
Anthropology	1,203	1,173	1,157	1,302	1,248	1,315	1,339	1,487	1,500
Economics (except agricultural)	3,196	3,089	3,203	3,259	3,272	3,336	3,362	3,411	3,431
Geography	193	184	193	163	156	168	166	169	170
History and philosophy of science	108	117	116	125	152	136	155	160	164
Linguistics	738	709	850	828	843	884	817	804	829
Political science	5,696	5,314	6,019	6,151	5,651	5,682	5,683	5,641	6,567
Sociology	1,338	1,226	1,294	1,225	1,329	1,405	1,441	1,505	1,483
Sociology/anthropology	259	195	169	165	139	130	158	185	195
Social sciences, n.e.c.	1,542	1,626	1,650	1,473	1,817	1,921	1,688	1,786	1,841
Total, health fields	5,809	5,680	5,639	5,785	5,699	5,719	5,981	6,248	7,298
Dentistry	201	211	231	211	197	202	196	163	192
Neurology	112	133	132	138	182	220	313	368	471
Nursing	1,585	1,538	1,497	1,331	1,179	969	994	1,010	1,374
Pharmaceutical sciences	244	250	264	282	292	319	338	374	421
Preventive medicine/community health	1,247	1,179	1,207	1,215	1,223	1,227	1,189	1,153	1,244
Speech pathology/audiology	841	777	919	810	699	731	838	705	871
Veterinary sciences	65	73	83	79	82	89	83	71	65
Clinical medicine, n.e.c.	332	299	339	309	353	366	429	457	566
Health related, n.e.c.	1,182	1,220	1,167	1,410	1,492	1,596	1,601	1,947	2,094

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table B-24. First-year full-time science and engineering graduate students in all institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all surveyed fields	81,961	80,476	81,166	82,900	80,938	80,838	84,827	85,616	93,430
Total, science/engineering fields	72,152	70,604	71,598	73,342	71,252	71,149	74,694	75,470	81,333
Engineering, total	19,097	19,004	18,289	20,368	19,380	19,241	19,836	19,968	22,544
Aerospace	614	759	722	811	920	913	982	933	1,125
Agricultural	266	250	238	233	245	242	202	204	207
Biomedical	366	335	359	427	417	414	449	469	516
Chemical	1,824	1,595	1,533	1,513	1,353	1,264	1,338	1,398	1,517
Civil	3,806	3,695	3,543	3,732	3,228	3,210	3,407	3,658	4,183
Electrical	4,648	5,100	4,875	5,619	5,437	5,582	5,716	5,685	6,216
Engineering science	399	372	338	441	367	344	331	259	312
Industrial	1,214	1,188	1,216	1,518	1,518	1,585	1,749	1,723	2,094
Mechanical	3,121	3,129	3,030	3,416	3,241	3,209	3,306	3,196	3,714
Metallurgical/materials	753	724	800	794	862	811	901	911	996
Mining	157	113	116	134	111	113	79	79	87
Nuclear	335	283	274	295	303	291	292	294	260
Petroleum	207	152	132	146	139	155	88	103	130
Engineering, n.e.c.	1,387	1,309	1,115	1,289	1,239	1,108	996	1,056	1,187
Sciences, total	53,055	51,600	53,309	52,974	51,872	51,908	54,858	55,502	58,789
Physical sciences	6,705	6,513	6,645	6,935	6,779	6,528	6,847	6,693	7,109
Astronomy	123	129	155	143	172	159	160	172	153
Chemistry	3,995	3,779	3,880	3,922	3,764	3,660	3,856	3,710	4,056
Physics	2,562	2,534	2,550	2,794	2,772	2,663	2,784	2,760	2,848
Physical sciences, n.e.c.	25	71	60	76	71	46	47	51	52
Earth, atmospheric, & ocean sciences	3,779	3,391	3,286	3,101	2,609	2,604	2,674	2,702	2,926
Atmospheric sciences	210	226	286	263	256	213	211	247	224
Geosciences	2,707	2,353	2,135	1,958	1,555	1,495	1,453	1,372	1,516
Oceanography	421	415	392	414	366	390	438	432	442
Earth, atmos., & ocean sci., n.e.c.	441	397	473	486	432	506	572	651	744
Mathematical sciences	3,598	3,734	3,977	4,024	3,898	3,915	4,219	4,234	4,319
Computer sciences	3,898	4,056	4,796	5,057	5,157	5,098	5,571	5,396	5,560
Agricultural sciences	2,815	2,701	2,431	2,367	2,186	2,194	2,341	2,429	2,428
Biological sciences	9,836	9,798	9,840	9,750	9,823	9,788	10,030	10,053	10,675
Anatomy	218	252	197	234	238	254	238	203	247
Biochemistry	1,003	1,030	1,095	1,094	990	1,027	1,054	1,024	1,037
Biology	2,585	2,634	2,415	2,372	2,450	2,399	2,480	2,504	2,718
Biometry/epidemiology	253	240	367	389	432	468	475	455	467
Biophysics	97	83	64	93	102	130	125	120	148
Botany	718	643	652	673	802	591	540	469	540
Cell biology	255	299	345	383	430	464	486	528	606
Ecology	192	178	207	171	149	189	155	187	197
Entomology/parasitology	260	272	249	236	247	204	199	220	230
Genetics	255	256	271	277	287	260	303	269	314
Microbiology	955	956	965	921	900	934	975	938	894
Nutrition	975	927	947	886	938	825	831	866	838
Pathology	279	271	255	248	260	243	270	254	277
Pharmacology	473	445	497	470	470	458	478	523	543
Physiology	566	616	629	604	579	596	590	653	592
Zoology	526	421	406	426	433	403	423	391	465
Biosciences, n.e.c.	228	275	279	273	316	343	408	449	562
Psychology	7,802	7,556	7,837	7,702	7,785	8,221	8,646	8,756	9,264
Social sciences	14,622	13,851	14,497	14,038	13,635	13,560	14,530	15,239	16,508
Agricultural economics	665	679	663	616	520	598	612	609	631
Anthropology	854	890	986	940	972	983	1,055	1,115	1,258
Economics (except agricultural)	2,861	2,646	2,674	2,678	2,478	2,577	2,519	2,795	2,869
Geography	745	680	717	688	716	706	762	756	832
History and philosophy of science	52	59	53	61	65	60	77	77	80
Linguistics	798	790	685	700	648	698	655	690	698
Political science	5,169	4,720	5,191	5,138	4,677	4,622	5,224	5,296	6,181
Sociology	1,225	1,218	1,181	1,169	1,354	1,306	1,459	1,516	1,510
Sociology/anthropology	214	159	198	206	200	213	204	238	179
Social sciences, n.e.c.	2,039	2,010	2,149	1,842	2,005	1,797	1,963	2,147	2,270
Total, health fields	9,809	9,872	9,568	9,558	9,686	9,689	10,133	10,146	12,097
Dentistry	262	318	314	376	400	384	362	322	344
Neurology	71	86	91	93	120	131	178	190	218
Nursing	2,770	2,606	2,331	2,210	2,254	2,110	1,985	1,364	2,425
Pharmaceutical sciences	471	474	456	467	465	442	546	523	805
Preventive medicine/community health	1,975	2,075	2,096	2,019	2,028	1,948	2,030	2,160	2,014
Speech pathology/audiology	2,329	2,366	2,365	2,293	2,124	2,311	2,357	2,457	2,946
Veterinary sciences	119	112	126	132	154	160	153	174	152
Clinical medicine, n.e.c.	361	326	384	418	413	421	524	523	689
Health related, n.e.c.	1,451	1,509	1,405	1,550	1,728	1,782	1,998	2,433	2,704

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table B-25. Full-time science and engineering graduate students beyond first year in all institutions, by field: 1983-81**

Page 1 of 1

Field	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all surveyed fields .....	170,885	174,259	177,075	184,175	190,834	195,387	199,022	203,365	215,239
Total, science/engineering fields .....	157,786	160,986	163,466	170,303	176,656	180,631	183,384	188,047	196,565
Engineering, total .....	34,834	36,153	37,849	39,859	42,505	43,946	44,710	45,724	48,686
Aerospace .....	1,226	1,095	1,272	1,341	1,452	1,620	1,790	2,077	2,189
Agricultural .....	500	523	529	646	679	637	649	589	618
Biomedical .....	665	786	770	667	975	1,041	1,162	1,312	1,405
Chemical .....	4,045	4,139	4,013	4,081	4,267	4,085	3,944	3,989	4,271
Civil .....	6,001	6,394	6,217	6,250	6,423	6,747	6,567	6,416	7,031
Electrical .....	8,555	8,757	9,877	10,603	11,603	12,071	12,680	12,882	13,772
Engineering science .....	957	900	928	1,004	1,006	1,074	928	984	1,052
Industrial .....	2,108	2,245	2,301	2,357	2,715	2,813	3,012	3,140	3,611
Mechanical .....	5,209	5,569	5,845	6,373	6,923	7,217	7,156	7,466	7,940
Metallurgical/materials .....	1,951	2,148	2,293	2,576	2,574	2,653	2,814	3,011	3,063
Mining .....	271	311	275	308	324	302	259	255	249
Nuclear .....	717	735	756	764	741	814	820	786	820
Petroleum .....	413	462	445	426	505	444	418	363	391
Engineering, n.e.c. ....	2,216	2,089	2,128	2,259	2,318	2,418	2,509	2,454	2,274
Sciences, total .....	122,952	124,833	125,817	130,444	134,151	136,685	138,674	142,323	147,879
Physical sciences .....	18,500	19,339	20,024	20,829	21,635	22,046	22,360	22,349	23,022
Astronomy .....	462	467	480	511	509	546	602	618	657
Chemistry .....	11,028	11,344	11,700	12,075	12,471	12,428	12,416	12,322	12,640
Physics .....	6,933	7,430	7,737	8,163	8,532	8,975	9,256	9,328	9,634
Physical sciences, n.e.c. ....	77	98	107	80	123	97	86	81	91
Earth, atmospheric, & ocean sciences .....	8,289	8,446	8,172	8,246	7,934	7,695	7,469	7,571	7,409
Atmospheric sciences .....	575	550	586	592	568	616	599	581	635
Geosciences .....	5,496	5,740	5,568	5,426	5,111	4,815	4,532	4,433	4,175
Oceanography .....	1,191	1,184	1,170	1,280	1,285	1,239	1,361	1,419	1,458
Earth, atmos., & ocean sci., n.e.c. ....	1,027	972	848	948	970	1,025	977	1,138	1,222
Mathematical sciences .....	7,359	7,577	7,841	8,366	9,146	9,599	9,476	9,600	9,940
Computer sciences .....	6,789	7,531	9,305	10,253	10,415	10,295	10,226	11,463	10,992
Agricultural sciences .....	7,111	7,150	6,760	6,947	6,877	6,878	6,660	6,623	6,810
Biological sciences .....	27,026	27,436	27,301	28,167	28,706	29,734	30,650	30,367	32,254
Anatomy .....	703	684	694	659	686	719	761	704	709
Biochemistry .....	2,975	3,205	3,368	3,546	3,624	3,716	3,766	3,783	3,930
Biology .....	6,416	6,331	6,115	6,185	6,224	6,468	6,838	6,697	6,876
Biometry/epidemiology .....	624	511	629	659	758	766	761	798	979
Biophysics .....	340	336	317	356	368	414	485	452	497
Botany .....	2,196	2,220	2,065	2,090	1,994	1,965	1,916	1,745	1,736
Cell biology .....	803	910	1,061	1,272	1,456	1,559	1,691	1,831	2,105
Ecology .....	652	699	669	686	647	647	724	703	739
Entomology/parasitology .....	1,045	992	889	871	815	857	810	777	784
Genetics .....	709	730	788	894	921	927	951	954	1,102
Microbiology .....	2,749	2,870	2,914	2,950	3,117	3,375	3,354	3,351	3,515
Nutrition .....	2,013	2,091	2,093	2,169	2,076	2,051	2,043	2,052	2,121
Pathology .....	777	799	772	807	833	866	879	871	889
Pharmacology .....	1,460	1,481	1,496	1,468	1,457	1,534	1,662	1,631	1,765
Physiology .....	1,200	1,353	1,357	1,401	1,417	1,412	1,467	1,483	1,568
Zoology .....	1,526	1,442	1,312	1,294	1,354	1,316	1,351	1,227	1,319
Biosciences, n.e.c. ....	758	782	784	340	961	1,142	1,189	1,328	1,620
Psychology .....	18,891	18,546	17,914	18,767	19,523	20,145	20,962	21,938	23,118
Social sciences .....	28,987	28,808	28,500	28,869	29,915	30,293	30,871	32,412	34,255
Agricultural economics .....	1,382	1,348	1,327	1,348	1,337	1,311	1,300	1,352	1,372
Anthropology .....	3,066	3,078	2,930	3,121	3,114	3,293	3,356	3,672	3,778
Economics (except agricultural) .....	6,282	6,125	6,284	6,281	6,507	6,444	6,569	6,421	6,861
Geography .....	1,457	1,495	1,407	1,420	1,574	1,509	1,596	1,624	1,742
History and philosophy of science .....	177	184	174	176	202	206	226	263	260
Linguistics .....	1,577	1,529	1,652	1,658	1,801	1,821	1,810	1,816	1,899
Political science .....	8,274	8,078	7,980	8,272	8,330	8,655	8,789	9,326	9,945
Sociology .....	3,569	3,527	3,463	3,403	3,572	3,776	3,810	4,152	4,336
Sociology/anthropology .....	457	447	367	378	360	353	429	530	508
Social sciences, n.e.c. ....	2,726	2,937	2,936	2,812	3,018	2,925	2,986	3,256	3,554
Total, health fields .....	13,099	13,273	13,809	13,872	14,178	14,756	15,638	15,318	18,674
Dentistry .....	438	454	432	440	501	539	488	490	545
Neurology .....	187	227	243	279	355	459	533	590	760
Nursing .....	3,434	3,507	3,282	3,424	3,405	3,398	3,346	2,537	4,067
Pharmaceutical sciences .....	1,297	1,297	1,333	1,374	1,359	1,465	1,571	1,473	1,667
Preventive medicine/community health .....	1,988	1,880	2,037	2,084	2,115	2,277	2,185	2,345	2,486
Speech pathology/audiology .....	2,926	2,899	3,081	3,098	2,870	2,936	3,283	3,281	3,700
Veterinary sciences .....	244	313	389	374	438	446	515	535	565
Clinical medicine, n.e.c. ....	711	704	761	709	758	812	862	879	923
Health related, n.e.c. ....	1,875	1,992	2,051	2,110	2,377	2,424	2,855	3,188	3,961

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table B-26. Full-time science and engineering graduate students in all institutions, by field and citizenship, and racial/ethnic background of U.S. citizens: 1983-91**

Page 1 of 3

Field, citizenship, and racial/ethnic background	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
<b>Total, all surveyed fields</b>	<b>252,846</b>	<b>254,735</b>	<b>258,241</b>	<b>267,075</b>	<b>271,772</b>	<b>276,225</b>	<b>283,849</b>	<b>288,981</b>	<b>308,669</b>
Total U.S. citizens	190,810	191,150	189,898	191,881	192,930	192,500	196,844	198,742	213,354
Black, non-Hispanic	6,617	6,582	6,449	6,406	6,461	7,030	7,611	7,919	8,949
American Indian/Alaskan Native	691	633	558	570	611	678	657	749	858
Asian/Pacific Islander	8,217	8,938	7,824	8,577	9,808	10,231	10,708	11,522	12,584
Hispanic	5,938	5,911	6,132	6,229	6,238	6,532	6,939	7,427	8,327
White, non-Hispanic	159,929	159,080	155,599	159,078	158,924	159,318	161,714	164,081	173,666
Other or unknown	11,420	12,008	13,336	11,021	10,888	8,713	9,215	7,044	8,970
Non-U.S. citizens	62,036	63,585	68,343	75,194	78,842	83,725	87,005	90,239	95,315
<b>Sciences, total</b>	<b>176,007</b>	<b>176,433</b>	<b>179,126</b>	<b>183,418</b>	<b>186,023</b>	<b>188,593</b>	<b>193,532</b>	<b>197,825</b>	<b>206,668</b>
Total U.S. citizens	139,141	138,404	137,422	137,909	137,937	137,530	140,240	142,334	149,065
Black, non-Hispanic	5,204	5,102	4,917	4,833	4,915	5,252	5,646	5,955	6,572
American Indian/Alaskan Native	484	441	411	415	454	497	488	586	612
Asian/Pacific Islander	3,956	4,267	4,713	5,151	5,898	6,208	6,513	6,952	7,429
Hispanic	4,325	4,318	4,412	4,430	4,352	4,574	4,935	5,277	5,810
White, non-Hispanic	117,988	116,434	113,936	115,584	115,287	115,330	117,013	119,116	123,283
Other or unknown	7,164	7,842	9,031	7,498	7,031	5,869	5,645	4,448	5,359
Non-U.S. citizens	38,866	38,029	41,704	45,509	48,086	51,063	53,292	55,491	57,603
<b>Physical sciences</b>	<b>25,205</b>	<b>25,852</b>	<b>26,669</b>	<b>27,764</b>	<b>28,414</b>	<b>28,574</b>	<b>29,207</b>	<b>29,042</b>	<b>30,131</b>
Total U.S. citizens	17,973	18,250	18,186	18,268	18,386	18,090	18,068	17,523	18,234
Black, non-Hispanic	412	437	379	391	406	442	483	483	522
American Indian/Alaskan Native	40	85	28	35	36	43	39	53	56
Asian/Pacific Islander	589	747	790	766	896	1,039	984	978	1,187
Hispanic	449	462	530	549	514	549	581	518	565
White, non-Hispanic	15,472	15,429	15,219	15,368	15,098	15,135	15,230	15,125	15,419
Other or unknown	1,011	1,110	1,240	1,157	1,436	882	751	366	485
Non-U.S. citizens	7,232	7,602	8,483	9,498	10,028	10,484	11,139	11,519	11,897
<b>Earth, atmospheric, &amp; ocean sciences</b>	<b>12,068</b>	<b>11,837</b>	<b>11,458</b>	<b>11,347</b>	<b>10,543</b>	<b>10,299</b>	<b>10,143</b>	<b>10,273</b>	<b>10,414</b>
Total U.S. citizens	10,374	10,241	9,767	9,450	8,575	8,119	7,818	7,842	7,854
Black, non-Hispanic	84	89	90	67	68	77	69	87	100
American Indian/Alaskan Native	24	18	21	17	15	23	21	26	18
Asian/Pacific Islander	156	145	155	125	143	173	166	187	195
Hispanic	145	193	184	179	183	167	172	188	194
White, non-Hispanic	9,333	8,815	8,494	8,473	7,699	7,386	7,184	7,160	7,089
Other or unknown	632	981	823	589	467	293	206	194	258
Non-U.S. citizens	1,694	1,596	1,691	1,897	1,968	2,180	2,325	2,431	2,560
<b>Mathematical sciences</b>	<b>10,957</b>	<b>11,311</b>	<b>11,818</b>	<b>12,390</b>	<b>13,044</b>	<b>13,514</b>	<b>13,695</b>	<b>13,834</b>	<b>14,259</b>
Total U.S. citizens	6,715	6,773	7,000	7,245	7,550	7,740	7,710	7,941	8,378
Black, non-Hispanic	164	187	197	244	257	217	254	263	273
American Indian/Alaskan Native	11	4	6	9	21	16	20	13	12
Asian/Pacific Islander	337	304	411	467	503	470	434	494	557
Hispanic	205	176	165	165	192	219	221	244	225
White, non-Hispanic	5,579	5,567	5,650	5,669	5,930	6,297	6,326	6,513	6,756
Other or unknown	419	535	571	491	647	521	455	414	553
Non-U.S. citizens	4,242	4,538	4,818	5,145	5,494	5,774	5,985	5,893	5,883
<b>Computer sciences</b>	<b>10,687</b>	<b>11,587</b>	<b>14,101</b>	<b>15,310</b>	<b>15,572</b>	<b>15,393</b>	<b>15,797</b>	<b>16,859</b>	<b>16,552</b>
Total U.S. citizens	6,724	7,052	8,551	9,178	9,087	8,635	8,788	8,887	8,559
Black, non-Hispanic	207	204	204	289	297	326	343	364	453
American Indian/Alaskan Native	11	37	45	10	15	12	17	18	18
Asian/Pacific Islander	558	545	735	884	1,062	1,140	1,107	1,180	1,160
Hispanic	105	115	130	161	161	162	199	189	193
White, non-Hispanic	5,053	5,345	6,006	6,659	6,635	6,278	6,288	6,439	6,023
Other or unknown	790	808	1,431	1,173	917	717	834	697	712
Non-U.S. citizens	3,963	4,535	5,550	6,134	6,485	6,758	7,009	7,972	7,993
<b>Agricultural sciences</b>	<b>9,928</b>	<b>9,851</b>	<b>9,191</b>	<b>9,314</b>	<b>9,063</b>	<b>9,072</b>	<b>9,001</b>	<b>9,052</b>	<b>9,238</b>
Total U.S. citizens	7,429	7,400	6,821	6,728	6,415	6,411	6,350	6,177	6,360
Black, non-Hispanic	112	104	111	94	100	118	123	131	115
American Indian/Alaskan Native	21	19	14	17	15	19	18	16	28
Asian/Pacific Islander	113	127	110	114	152	167	207	207	192
Hispanic	182	202	268	251	184	233	250	243	236
White, non-Hispanic	6,756	6,824	6,069	6,069	5,830	5,874	5,579	5,481	5,679
Other or unknown	245	124	249	183	134	180	173	119	110
Non-U.S. citizens	2,497	2,451	2,370	2,586	2,648	2,661	2,651	2,875	2,878

See explanatory information, if any, and SOURCE(S) at end of table.



Table B-26. Full-time science and engineering graduate students in all institutions, by field and citizenship, and racial/ethnic background of U.S. citizens: 1983-91

Page 2 of 3

Field, citizenship, and racial/ethnic background	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
<b>Biological sciences</b>	36,862	37,234	37,141	37,917	38,529	39,522	40,680	40,420	42,929
Total U.S. citizens	31,382	31,468	30,826	30,752	30,497	30,504	30,641	29,984	31,387
Black, non-Hispanic	836	810	810	757	763	818	887	907	995
American Indian/Alaskan Native	88	69	73	88	76	81	70	110	91
Asian/Pacific Islander	1,023	1,121	1,247	1,341	1,425	1,566	1,740	1,929	2,060
Hispanic	716	672	757	751	829	903	968	951	1,113
White, non-Hispanic	27,834	28,048	26,973	27,015	26,478	26,463	26,121	25,473	26,453
Other or unknown	883	750	966	800	926	673	855	624	675
Non-U.S. citizens	5,480	5,766	6,315	7,165	8,032	9,018	10,039	10,426	11,542
<b>Psychology</b>	26,693	26,102	25,751	26,469	27,308	28,366	29,608	30,694	32,382
Total U.S. citizens	25,600	25,057	24,590	25,299	26,114	27,037	28,263	29,212	30,762
Black, non-Hispanic	1,136	1,110	1,053	1,089	1,073	1,176	1,233	1,263	1,448
American Indian/Alaskan Native	93	82	88	98	112	120	129	150	181
Asian/Pacific Islander	368	383	381	445	555	578	638	728	761
Hispanic	1,134	1,148	1,008	1,141	1,100	1,115	1,238	1,410	1,617
White, non-Hispanic	21,342	20,632	20,470	21,147	22,308	22,910	24,015	24,809	25,623
Other or unknown	1,527	1,702	1,585	1,379	968	1,138	1,010	852	1,132
Non-U.S. citizens	1,093	1,045	1,161	1,170	1,194	1,329	1,345	1,482	1,620
<b>Social sciences</b>	43,609	42,659	42,997	42,907	43,550	43,853	45,401	47,651	50,763
Total U.S. citizens	32,944	32,163	31,681	30,993	31,313	30,994	32,602	34,758	37,533
Black, non-Hispanic	2,253	2,161	2,068	1,902	1,951	2,078	2,254	2,457	2,666
American Indian/Alaskan Native	196	147	136	141	164	183	174	200	208
Asian/Pacific Islander	812	895	884	1,009	1,162	1,055	1,237	1,249	1,317
Hispanic	1,387	1,350	1,370	1,233	1,189	1,226	1,306	1,534	1,667
White, non-Hispanic	26,619	25,776	25,057	24,984	25,309	25,187	26,270	28,136	30,241
Other or unknown	1,677	1,834	2,166	1,724	1,538	1,265	1,361	1,182	1,434
Non-U.S. citizens	10,665	10,496	11,316	11,914	12,237	12,859	12,799	12,893	13,230
<b>Engineering, total</b>	53,931	55,157	55,938	60,227	61,885	63,187	64,546	65,692	71,230
Total U.S. citizens	31,170	31,959	31,841	33,244	33,893	33,610	34,153	34,396	37,350
Black, non-Hispanic	647	687	691	733	707	822	948	953	1,151
American Indian/Alaskan Native	98	110	68	77	66	78	65	63	108
Asian/Pacific Islander	1,710	2,110	2,560	2,766	3,194	3,248	3,284	3,568	3,894
Hispanic	749	711	737	815	846	933	1,006	1,076	1,171
White, non-Hispanic	24,338	25,005	24,424	26,074	26,003	26,150	26,072	26,679	28,190
Other or unknown	3,628	3,336	3,361	2,779	3,077	2,379	2,778	2,057	2,836
Non-U.S. citizens	22,761	23,198	24,097	26,983	27,992	29,577	30,393	31,296	33,880
<b>Chemical engineering</b>	5,669	5,734	5,546	5,594	5,620	5,359	5,282	5,387	5,788
Total U.S. citizens	3,630	3,603	3,337	3,412	3,345	2,967	2,677	2,660	2,821
Black, non-Hispanic	64	54	52	61	63	59	60	65	95
American Indian/Alaskan Native	9	7	6	2	26	22	5	1	22
Asian/Pacific Islander	235	260	200	230	287	253	184	251	324
Hispanic	60	97	74	86	91	110	93	110	110
White, non-Hispanic	3,032	2,948	2,818	2,846	2,749	2,435	2,236	2,181	2,203
Other or unknown	230	239	187	187	129	89	99	52	67
Non-U.S. citizens	2,239	2,131	2,209	2,182	2,275	2,392	2,605	2,727	2,967
<b>Civil engineering</b>	9,807	10,089	9,760	9,982	9,651	9,957	9,974	10,074	11,214
Total U.S. citizens	5,545	5,688	5,290	5,311	5,104	5,215	5,104	5,337	6,064
Black, non-Hispanic	91	93	101	93	73	101	151	116	152
American Indian/Alaskan Native	12	9	9	15	5	13	14	17	20
Asian/Pacific Islander	237	241	278	271	343	324	324	409	450
Hispanic	147	161	141	154	159	154	154	182	225
White, non-Hispanic	4,464	4,508	4,275	4,371	4,125	4,334	4,207	4,381	4,970
Other or unknown	594	676	486	407	399	289	254	232	247
Non-U.S. citizens	4,262	4,401	4,470	4,671	4,547	4,742	4,870	4,737	5,150
<b>Electrical engineering</b>	13,203	13,857	14,752	16,222	17,040	17,653	18,396	18,567	19,988
Total U.S. citizens	7,363	7,861	8,113	8,523	8,959	9,284	9,683	9,609	10,136
Black, non-Hispanic	200	219	228	232	237	291	320	322	378
American Indian/Alaskan Native	25	27	16	33	5	16	19	17	26
Asian/Pacific Islander	460	763	920	979	1,234	1,327	1,346	1,513	1,562
Hispanic	180	201	213	250	255	269	299	294	332
White, non-Hispanic	5,261	5,587	5,740	6,191	6,373	6,557	6,866	6,799	6,913
Other or unknown	1,237	1,064	996	838	855	804	633	664	925
Non-U.S. citizens	5,840	5,996	6,639	7,699	8,081	8,369	8,713	8,958	9,852

See explanatory information, if any, and SOURCE(S) at end of table.

**Table B-26. Full-time science and engineering graduate students in all institutions, by field and citizenship, and racial/ethnic background of U.S. citizens: 1983-91**

Page 3 of 3

Field, citizenship, and racial/ethnic background	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Industrial engineering .....	3,322	3,433	3,517	3,875	4,233	4,398	4,761	4,863	5,705
Total U.S. citizens .....	1,957	1,963	1,899	2,079	2,174	2,274	2,467	2,439	2,827
Black, non-Hispanic .....	71	74	70	76	77	104	105	120	160
American Indian/Alaskan Native .....	3	15	5	2	4	4	8	7	9
Asian/Pacific Islander .....	80	83	125	178	174	195	202	182	238
Hispanic .....	58	60	84	98	90	106	120	109	107
White, non-Hispanic .....	1,671	1,632	1,476	1,601	1,620	1,672	1,835	1,845	2,057
Other or unknown .....	74	99	139	124	209	193	197	176	256
Non-U.S. citizens .....	1,365	1,470	1,618	1,796	2,059	2,124	2,294	2,424	2,878
Mechanical engineering .....	8,330	8,698	8,875	9,789	10,164	10,426	10,464	10,662	11,654
Total U.S. citizens .....	4,327	4,591	4,858	5,218	5,518	5,305	5,617	5,680	6,099
Black, non-Hispanic .....	76	92	84	96	102	122	120	151	148
American Indian/Alaskan Native .....	11	9	11	5	12	8	6	6	9
Asian/Pacific Islander .....	213	272	451	481	524	462	471	444	531
Hispanic .....	64	66	95	100	108	110	120	158	191
White, non-Hispanic .....	3,568	3,687	3,469	4,037	4,005	4,058	3,933	4,372	4,577
Other or unknown .....	395	465	748	499	767	545	967	549	643
Non-U.S. citizens .....	4,003	4,107	4,017	4,571	4,646	5,121	4,847	4,982	5,555
Other engineering .....	13,400	13,346	13,488	14,765	15,177	15,394	15,669	16,139	16,881
Total U.S. citizens .....	8,348	8,253	8,344	8,701	8,793	8,585	8,605	8,671	9,403
Black, non-Hispanic .....	145	155	156	175	155	145	192	179	218
American Indian/Alaskan Native .....	38	43	21	20	14	15	13	15	22
Asian/Pacific Islander .....	485	491	586	627	632	687	757	769	789
Hispanic .....	240	126	130	127	143	184	220	223	206
White, non-Hispanic .....	6,342	6,645	6,646	7,028	7,131	7,094	6,995	7,101	7,470
Other or unknown .....	1,098	793	805	724	718	460	428	384	698
Non-U.S. citizens .....	5,052	5,093	5,144	6,064	6,384	6,809	7,064	7,468	7,478
Total, health fields .....	22,908	23,145	23,177	23,430	23,864	24,445	25,771	25,464	30,771
Total U.S. citizens .....	20,499	20,787	20,635	20,728	21,100	21,360	22,451	22,012	26,939
Black, non-Hispanic .....	766	793	841	840	839	956	1,017	1,011	1,226
American Indian/Alaskan Native .....	109	82	79	78	91	103	104	100	138
Asian/Pacific Islander .....	551	559	551	660	716	775	911	1,002	1,261
Hispanic .....	862	882	983	984	1,040	1,025	998	1,074	1,346
White, non-Hispanic .....	17,603	17,641	17,237	17,420	17,634	17,836	18,629	18,286	22,193
Other or unknown .....	608	830	944	746	780	665	792	539	775
Non-U.S. citizens .....	2,409	2,358	2,542	2,702	2,764	3,085	3,320	3,452	3,832

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



**Table B-27. Full-time science and engineering graduate students in all institutions, by field and source of major support: 1983-91**

Page 1 of 4

Field and source of major support	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
<b>Total, all surveyed fields</b>									
Total, all sources	252,848	254,735	258,241	267,075	271,772	276,225	283,849	288,981	308,669
Federal, total	47,829	47,842	48,902	51,318	53,315	55,440	57,370	57,875	63,444
Dept of Defense	7,010	7,151	7,332	7,943	8,796	9,513	9,190	8,738	9,195
Dept of HHS, total	14,985	15,113	15,634	16,271	17,040	17,876	18,446	18,279	20,594
NIH	10,840	11,000	11,128	11,895	12,903	13,753	14,473	14,731	16,033
Other HHS	4,145	4,113	4,508	4,376	4,137	4,123	3,973	3,548	4,561
NSF	9,523	9,850	10,181	10,832	11,241	11,632	11,894	11,949	12,626
USDA	NA	NA	2,180	2,347	2,696	2,607	2,745	2,719	3,085
All other Federal	16,311	15,728	13,575	13,925	13,542	13,812	15,095	16,190	17,964
Institutional support	98,320	102,379	104,396	109,447	112,430	115,178	119,638	121,083	126,136
Other outside support, total	24,926	24,876	26,612	26,767	25,466	25,758	25,863	25,659	27,064
All other U.S.	15,949	16,697	18,814	19,080	18,329	18,817	19,187	19,266	20,416
Foreign	8,977	8,179	7,798	7,687	7,137	6,941	6,676	6,393	6,648
Self-support	81,771	79,638	78,331	79,543	80,561	79,849	80,978	84,364	92,025
<b>Sciences, total</b>									
Total, all sources	176,007	176,433	179,126	183,418	186,023	188,593	193,532	197,825	206,668
Federal, total	30,090	30,398	31,620	32,943	34,007	35,210	36,806	37,473	40,140
Dept of Defense	2,736	3,065	3,278	3,595	3,972	4,299	3,947	3,700	3,816
Dept of HHS, total	10,162	10,356	10,685	11,292	11,953	12,713	13,388	13,579	14,644
NIH	9,146	9,487	9,590	10,273	10,910	11,788	12,296	12,460	13,369
Other HHS	1,016	869	1,095	1,019	1,043	925	1,092	1,119	1,275
NSF	6,813	7,112	7,454	7,661	7,718	7,776	8,081	8,035	8,295
USDA	NA	NA	1,992	2,111	2,392	2,379	2,489	2,436	2,725
All other Federal	10,379	9,865	8,211	8,284	7,972	8,043	8,901	9,723	10,660
Institutional support	76,995	79,534	80,317	83,288	85,106	87,334	89,950	91,211	93,710
Other outside support, total	15,105	14,494	15,304	14,981	14,230	14,396	14,386	14,056	14,873
All other U.S.	9,051	9,070	10,248	10,027	9,653	9,874	10,236	10,116	10,765
Foreign	6,054	5,424	5,056	4,954	4,577	4,522	4,150	3,940	4,108
Self-support	53,817	52,007	51,885	52,206	52,680	51,653	52,390	55,085	57,945
<b>Physical sciences</b>									
Total, all sources	25,205	25,852	26,669	27,764	28,414	28,574	29,207	29,042	30,131
Federal, total	8,126	8,640	8,821	9,523	9,717	9,857	10,247	10,169	10,850
Dept of Defense	831	1,011	1,024	1,161	1,292	1,475	1,392	1,203	1,228
Dept of HHS, total	1,535	1,628	1,796	2,012	2,097	2,152	2,111	2,056	2,045
NIH	1,437	1,506	1,635	1,847	1,930	2,002	1,981	1,929	1,877
Other HHS	98	122	161	165	167	150	130	127	168
NSF	3,218	3,406	3,516	3,671	3,590	3,656	3,612	3,547	3,579
USDA	NA	NA	35	31	44	32	43	53	61
All other Federal	2,542	2,595	2,450	2,648	2,694	2,542	3,089	3,310	3,937
Institutional support	13,801	13,701	13,962	14,417	14,821	14,860	15,150	14,952	15,096
Other outside support, total	1,705	1,830	2,091	1,931	1,873	1,980	2,007	1,957	2,220
All other U.S.	1,237	1,391	1,656	1,588	1,596	1,662	1,751	1,704	1,910
Foreign	468	439	435	343	277	318	256	253	310
Self-support	1,773	1,681	1,795	1,893	2,003	1,877	1,803	1,964	1,965
<b>Earth, atmospheric, &amp; ocean sciences</b>									
Total, all sources	12,068	11,837	11,458	11,347	10,543	10,299	10,143	10,273	10,414
Federal, total	2,877	2,852	2,960	3,033	2,868	2,799	2,903	2,957	3,085
Dept of Defense	365	372	418	453	499	461	435	435	433
Dept of HHS, total	38	41	41	39	58	51	25	34	55
NIH	15	30	26	25	24	19	17	21	22
Other HHS	23	11	15	14	34	32	8	13	33
NSF	1,325	1,341	1,374	1,357	1,261	1,236	1,253	1,186	1,198
USDA	NA	NA	42	18	33	45	43	63	74
All other Federal	1,149	1,098	1,085	1,186	1,017	1,006	1,147	1,239	1,325
Institutional support	4,269	4,388	4,170	4,390	4,226	4,343	4,318	4,263	4,361
Other outside support, total	1,293	1,256	1,397	1,183	1,001	1,039	999	953	990
All other U.S.	985	937	1,034	869	674	675	658	682	702
Foreign	308	319	363	314	327	364	341	271	288
Self-support	3,629	3,341	2,931	2,741	2,448	2,118	1,923	2,100	1,978
<b>Mathematical sciences</b>									
Total, all sources	10,957	11,311	11,818	12,390	13,044	13,514	13,695	13,834	14,259
Federal, total	760	762	935	999	1,090	1,190	1,221	1,335	1,502
Dept of Defense	310	304	386	432	438	513	395	367	376
Dept of HHS, total	41	26	21	24	30	28	36	49	69
NIH	28	22	18	19	24	25	28	39	64
Other HHS	13	4	3	5	6	3	8	10	5
NSF	223	279	321	357	436	463	475	491	452
USDA	NA	NA	13	18	16	20	22	23	21
All other Federal	186	153	194	168	170	166	293	405	584
Institutional support	7,493	7,767	8,106	8,485	8,836	9,132	9,385	9,461	9,532
Other outside support, total	511	632	549	598	548	616	593	563	605
All other U.S.	174	272	257	253	239	350	356	308	321
Foreign	337	360	292	345	309	286	237	255	284
Self-support	2,193	2,150	2,228	2,308	2,570	2,576	2,496	2,475	2,620

See explanatory information, if any, and SOURCE(S) at end of table.

**Table B-27. Full-time science and engineering graduate students in all institutions, by field and source of major support: 1983-91**

Page 2 of 4

Field and source of major support	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
<b>Computer sciences</b>									
Total, all sources	10,687	11,587	14,101	15,310	15,572	15,393	15,797	16,859	16,552
Federal, total	1,130	1,269	1,638	1,892	2,084	2,226	2,331	2,412	2,533
Dept of Defense	475	630	860	1,037	1,137	1,214	1,164	1,129	1,121
Dept of HHS, total	29	25	21	45	62	64	60	71	71
NIH	26	24	20	43	61	64	53	62	65
Other HHS	3	1	1	2	1	0	7	9	6
NSF	386	431	502	527	623	634	779	819	906
USDA	NA	NA	4	3	17	10	7	14	8
All other Federal	240	183	251	280	245	304	321	379	427
Institutional support	3,216	3,691	4,308	4,573	5,000	5,153	5,361	5,640	5,386
Other outside support, total	834	818	1,378	1,554	1,283	1,300	1,265	1,264	1,358
All other U.S.	576	563	1,024	1,218	983	971	933	917	1,002
Foreign	258	255	354	336	300	329	332	347	358
Self-support	5,507	5,809	6,777	7,291	7,205	6,714	6,840	7,543	7,275
<b>Agricultural sciences</b>									
Total, all sources	9,926	9,851	9,191	9,314	9,063	9,072	9,001	9,052	9,238
Federal, total	1,566	1,406	1,556	1,656	1,719	1,771	1,794	1,775	1,858
Dept of Defense	15	17	28	17	30	32	13	18	30
Dept of HHS, total	25	18	17	15	29	32	28	36	36
NIH	19	17	17	14	22	31	17	31	28
Other HHS	6	1	0	1	7	1	11	5	8
NSF	70	70	96	72	61	50	47	62	62
USDA	NA	NA	686	896	945	955	1,064	949	1,086
All other Federal	1,456	1,301	729	656	654	702	642	710	644
Institutional support	3,698	3,987	3,502	3,640	3,598	3,482	3,452	3,475	3,562
Other outside support, total	2,147	1,991	1,895	1,792	1,626	1,718	1,658	1,741	1,687
All other U.S.	964	932	1,017	921	817	936	1,009	1,095	1,042
Foreign	1,183	1,059	878	871	809	782	649	646	645
Self-support	2,515	2,467	2,238	2,226	2,120	2,101	2,097	2,061	2,131
<b>Biological sciences</b>									
Total, all sources	36,862	37,234	37,141	37,917	38,529	39,522	40,680	40,420	42,929
Federal, total	10,295	10,460	10,731	11,159	11,872	12,524	13,305	13,438	14,501
Dept of Defense	243	241	220	189	248	284	257	214	238
Dept of HHS, total	7,119	7,253	7,415	7,906	8,348	8,944	9,632	9,739	10,641
NIH	6,809	7,030	7,058	7,537	8,014	8,677	9,279	9,374	10,146
Other HHS	310	223	357	369	334	267	353	365	495
NSF	1,062	1,078	1,074	1,081	1,137	1,122	1,258	1,208	1,277
USDA	NA	NA	810	819	984	995	960	975	1,075
All other Federal	1,871	1,888	1,212	1,164	1,155	1,179	1,200	1,302	1,270
Institutional support	16,639	17,135	17,048	17,631	17,701	17,988	18,532	18,461	19,323
Other outside support, total	3,186	3,092	3,251	3,062	3,144	3,432	3,479	3,507	3,759
All other U.S.	2,062	2,079	2,322	2,131	2,269	2,596	2,670	2,783	3,023
Foreign	1,124	1,013	929	931	875	836	809	724	736
Self-support	6,742	6,547	6,111	6,065	5,812	5,578	5,364	5,014	5,346
<b>Psychology</b>									
Total, all sources	26,893	26,102	25,751	26,469	27,308	28,366	29,608	30,694	32,382
Federal, total	2,141	2,061	2,048	2,031	2,049	2,170	2,215	2,491	2,682
Dept of Defense	174	157	140	158	177	153	117	156	163
Dept of HHS, total	1,024	1,043	1,053	947	1,006	1,124	1,183	1,281	1,352
NIH	600	647	619	586	627	763	720	795	899
Other HHS	424	396	434	361	379	361	463	486	453
NSF	190	206	235	231	246	233	236	262	269
USDA	NA	NA	13	9	18	25	29	34	32
All other Federal	753	655	607	686	602	635	650	758	866
Institutional support	9,824	10,251	10,509	10,941	10,776	11,288	11,764	11,987	12,425
Other outside support, total	1,352	1,379	1,378	1,414	1,281	1,059	1,126	1,097	1,075
All other U.S.	1,281	1,310	1,321	1,344	1,219	995	1,071	1,039	1,020
Foreign	71	69	57	70	62	84	55	58	55
Self-support	13,378	12,411	11,816	12,083	13,202	13,849	14,503	15,109	16,200
<b>Social sciences</b>									
Total, all sources	43,609	42,659	42,997	42,907	43,550	43,853	45,401	47,651	50,763
Federal, total	3,195	2,948	2,931	2,650	2,608	2,673	2,790	2,896	3,129
Dept of Defense	323	333	202	148	151	167	174	178	227
Dept of HHS, total	351	322	321	304	323	318	313	313	375
NIH	212	211	197	202	208	207	201	209	268
Other HHS	139	111	124	102	115	111	112	104	107
NSF	339	301	336	365	364	382	423	460	552
USDA	NA	NA	389	317	335	297	321	325	368
All other Federal	2,182	1,992	1,683	1,516	1,435	1,509	1,559	1,620	1,607
Institutional support	18,255	18,614	18,712	19,211	20,148	21,088	21,988	22,962	24,025
Other outside support, total	4,077	3,496	3,365	3,447	3,474	3,252	3,259	2,974	3,179
All other U.S.	1,772	1,586	1,617	1,703	1,856	1,689	1,768	1,588	1,745
Foreign	2,305	1,910	1,748	1,744	1,618	1,563	1,471	1,386	1,434
Self-support	18,082	17,601	17,989	17,599	17,320	16,840	17,364	18,819	20,430

See explanatory information, if any, and SOURCE(S) at end of table.

Table B-27. Full-time science and engineering graduate students in all institutions, by field and source of major support: 1983-91

Page 3 of 4

Field and source of major support	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
<b>Engineering, total</b>									
Total, all sources	53,931	55,157	55,938	60,227	61,885	63,187	64,546	65,692	71,230
Federal, total	11,970	11,584	11,260	12,377	13,105	14,020	14,258	14,650	16,060
Dept of Defense	4,014	3,808	3,774	4,115	4,585	4,970	4,808	4,673	4,874
Dept of HHS, total	575	544	524	536	622	628	729	788	842
NIH	477	466	455	449	508	555	644	685	751
Other HHS	98	78	69	87	114	73	85	103	91
NSF	2,680	2,696	2,666	3,128	3,474	3,808	3,766	3,868	4,274
USDA	NA	NA	164	194	256	197	210	225	280
All other Federal	4,701	4,536	4,112	4,404	4,168	4,417	4,745	5,096	5,790
Institutional support	16,315	17,397	18,407	20,239	21,366	21,565	22,602	23,050	24,715
Other outside support, total	8,193	8,735	9,648	10,201	9,712	10,072	10,039	10,279	10,818
All other U.S.	5,761	6,484	7,437	8,000	7,667	8,055	8,009	8,295	8,538
Foreign	2,432	2,251	2,211	2,201	2,045	2,017	2,030	1,984	2,080
Self-support	17,453	17,441	16,623	17,410	17,702	17,530	17,447	17,713	19,837
<b>Chemical engineering</b>									
Total, all sources	5,869	5,734	5,546	5,594	5,620	5,359	5,282	5,387	5,788
Federal, total	1,361	1,315	1,289	1,394	1,486	1,452	1,459	1,513	1,598
Dept of Defense	99	92	90	101	150	145	130	96	134
Dept of HHS, total	53	67	53	69	71	83	87	121	132
NIH	41	60	52	67	83	79	87	119	128
Other HHS	12	7	1	2	8	4	0	2	4
NSF	602	606	622	652	686	683	654	674	664
USDA	NA	NA	9	6	24	7	13	27	16
All other Federal	607	550	515	566	555	534	575	595	652
Institutional support	2,056	2,038	2,022	2,048	2,038	2,021	1,976	2,087	2,269
Other outside support, total	1,255	1,347	1,342	1,301	1,308	1,279	1,278	1,219	1,241
All other U.S.	1,058	1,194	1,193	1,172	1,180	1,166	1,184	1,122	1,124
Foreign	197	153	149	129	128	113	94	97	117
Self-support	1,197	1,034	893	851	788	607	569	568	680
<b>Civil engineering</b>									
Total, all sources	9,807	10,089	9,760	9,982	9,651	9,957	9,974	10,074	11,214
Federal, total	1,333	1,349	1,304	1,370	1,432	1,512	1,403	1,461	1,750
Dept of Defense	168	224	256	250	277	327	280	235	273
Dept of HHS, total	26	8	18	28	12	5	18	15	35
NIH	16	8	9	18	8	3	16	11	31
Other HHS	10	0	9	10	4	2	2	4	4
NSF	371	371	356	390	462	420	382	428	496
USDA	NA	NA	6	23	37	37	33	36	51
All other Federal	770	746	668	679	644	723	690	747	895
Institutional support	2,861	2,987	3,155	3,552	3,602	3,850	3,910	3,886	4,217
Other outside support, total	1,338	1,356	1,311	1,248	1,085	1,108	1,200	1,241	1,338
All other U.S.	813	874	875	808	695	695	723	816	917
Foreign	525	482	436	440	390	413	477	425	421
Self-support	4,275	4,397	3,990	3,812	3,532	3,487	3,461	3,486	3,909
<b>Electrical engineering</b>									
Total, all sources	13,203	13,857	14,752	16,222	17,040	17,653	18,396	18,567	19,988
Federal, total	2,961	2,757	2,391	2,794	3,051	3,499	3,520	3,620	3,957
Dept of Defense	1,704	1,556	1,298	1,415	1,582	1,665	1,648	1,616	1,621
Dept of HHS, total	103	95	81	80	68	124	93	111	119
NIH	77	75	62	57	56	99	73	85	106
Other HHS	26	20	19	23	32	25	20	26	13
NSF	639	598	556	757	848	1,140	1,085	1,132	1,284
USDA	NA	NA	5	4	15	17	20	22	24
All other Federal	515	508	451	538	518	553	674	739	909
Institutional support	3,900	4,355	4,933	5,175	5,563	5,648	6,310	6,245	6,824
Other outside support, total	1,962	2,249	2,431	3,155	2,760	2,807	2,856	2,910	3,010
All other U.S.	1,466	1,716	1,848	2,533	2,183	2,361	2,386	2,400	2,456
Foreign	498	533	583	622	577	446	490	510	554
Self-support	4,380	4,496	4,997	5,098	5,666	5,699	5,710	5,792	6,397
<b>Industrial engineering</b>									
Total, all sources	3,322	3,433	3,517	3,875	4,233	4,398	4,761	4,863	5,705
Federal, total	422	411	395	377	470	561	591	622	716
Dept of Defense	144	133	187	148	213	284	289	311	293
Dept of HHS, total	50	49	45	45	44	39	59	60	52
NIH	31	25	30	14	23	22	25	27	16
Other HHS	19	24	15	31	21	17	34	33	36
NSF	40	55	41	79	97	115	126	129	189
USDA	NA	NA	1	1	1	2	0	1	5
All other Federal	188	174	121	104	115	121	117	121	177
Institutional support	1,055	1,142	1,229	1,342	1,508	1,486	1,667	1,699	1,899
Other outside support, total	328	380	425	449	452	506	537	558	486
All other U.S.	174	264	315	360	370	394	388	400	362
Foreign	154	116	110	89	82	112	149	158	124
Self-support	1,517	1,500	1,468	1,707	1,803	1,845	1,966	1,984	2,604

See explanatory information, if any, and SOURCE(S) at end of table.

**Table B-27. Full-time science and engineering graduate students in all institutions, by field and source of major support: 1983-81**

Page 4 of 4

Field and source of major support	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
<b>Mechanical engineering</b>									
Total, all sources	8,330	8,698	8,875	9,789	10,164	10,426	10,484	10,662	11,654
Federal, total	1,584	1,650	1,907	2,048	2,264	2,435	2,485	2,522	2,767
Dept of Defense	393	382	540	633	770	819	840	751	775
Dept of HHS, total	73	64	89	61	84	70	61	69	71
NIH	65	58	72	52	67	65	54	68	58
Other HHS	8	6	17	9	17	5	7	1	13
NSF	352	391	439	477	591	661	632	634	732
USDA	NA	NA	19	10	15	16	28	26	29
All other Federal	748	813	820	867	804	869	924	1,042	1,160
Institutional support	2,809	3,126	3,133	3,683	3,841	3,783	3,854	3,919	4,254
Other outside support, total	1,184	1,273	1,607	1,504	1,488	1,536	1,542	1,583	1,686
All other U.S.	872	957	1,354	1,249	1,272	1,303	1,327	1,367	1,415
Foreign	312	316	253	255	216	233	215	216	271
Self-support	2,713	2,649	2,228	2,554	2,571	2,672	2,583	2,638	2,947
<b>Other engineering</b>									
Total, all sources	13,400	13,346	13,488	14,765	15,177	15,394	15,669	16,139	16,681
Federal, total	4,329	4,102	3,974	4,394	4,402	4,561	4,800	4,912	5,272
Dept of Defense	1,508	1,421	1,403	1,568	1,593	1,730	1,621	1,664	1,778
Dept of HHS, total	270	261	238	253	323	307	411	412	433
NIH	247	240	230	241	291	287	389	375	412
Other HHS	23	21	8	12	32	20	22	37	21
NSF	676	675	672	773	790	789	887	871	909
USDA	NA	NA	124	150	164	118	116	113	155
All other Federal	1,875	1,745	1,537	1,650	1,532	1,617	1,765	1,852	1,997
Institutional support	3,574	3,749	3,935	4,439	4,814	4,777	5,085	5,214	5,452
Other outside support, total	2,126	2,130	2,532	2,544	2,619	2,836	2,626	2,768	2,857
All other U.S.	1,378	1,479	1,852	1,878	1,967	2,136	2,021	2,190	2,264
Foreign	748	651	680	666	652	700	605	578	593
Self-support	3,371	3,365	3,047	3,388	3,342	3,220	3,158	3,245	3,300
<b>Total, health fields</b>									
Total, all sources	22,908	23,145	23,177	23,430	23,864	24,445	25,771	25,464	30,771
Federal, total	5,769	5,860	6,022	5,998	6,203	6,210	6,306	5,752	7,244
Dept of Defense	260	278	280	233	239	244	435	365	505
Dept of HHS, total	4,248	4,213	4,425	4,443	4,465	4,535	4,329	3,912	5,108
NIH	1,217	1,047	1,083	1,173	1,485	1,410	1,533	1,586	1,913
Other HHS	3,031	3,166	3,342	3,270	2,980	3,125	2,796	2,326	3,195
NSF	30	42	41	43	49	48	47	46	57
USDA	NA	NA	24	42	48	31	48	58	60
All other Federal	1,231	1,327	1,252	1,237	1,402	1,352	1,449	1,371	1,514
Institutional support	5,010	5,448	5,672	5,920	5,958	6,279	6,886	6,822	7,711
Other outside support, total	1,628	1,647	1,660	1,585	1,524	1,290	1,438	1,324	1,573
All other U.S.	1,137	1,143	1,129	1,053	1,009	888	942	855	1,113
Foreign	491	504	531	532	515	402	496	469	460
Self-support	10,501	10,190	9,823	9,927	10,179	10,666	11,141	11,566	14,243

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: NA = Not available

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates In Science and Engineering

Table B-28. Full-time science and engineering graduate students supported by Federal sources  
in all institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all surveyed fields .....	47,829	47,842	48,902	51,318	53,315	55,440	57,370	57,875	63,444
Total, science/engineering fields .....	42,060	41,982	42,880	45,320	47,112	49,230	51,064	52,123	56,200
Engineering, total .....	11,970	11,584	11,260	12,377	13,105	14,020	14,258	14,650	16,060
Aerospace .....	878	847	871	967	993	1,042	1,129	1,137	1,341
Agricultural .....	145	147	212	184	218	141	152	142	180
Biomedical .....	252	259	241	331	347	351	474	504	580
Chemical .....	1,361	1,315	1,289	1,394	1,486	1,452	1,459	1,513	1,598
Civil .....	1,333	1,349	1,304	1,370	1,432	1,512	1,403	1,461	1,750
Electrical .....	2,961	2,757	2,391	2,794	3,051	3,499	3,520	3,620	3,957
Engineering science .....	679	568	465	454	456	546	428	423	476
Industrial .....	422	411	395	377	470	581	591	622	716
Mechanical .....	1,564	1,650	1,907	2,048	2,264	2,435	2,485	2,522	2,767
Metallurgical/materials .....	1,198	1,164	1,219	1,389	1,304	1,368	1,519	1,489	1,446
Mining .....	86	97	91	120	125	126	90	106	86
Nuclear .....	364	344	311	323	307	358	402	382	413
Petroleum .....	46	64	47	40	72	43	25	26	55
Engineering, n.e.c. ....	681	612	517	586	580	586	581	703	715
Sciences, total .....	30,090	30,398	31,620	32,943	34,007	35,210	36,806	37,473	40,140
Physical sciences .....	8,126	8,640	8,821	9,523	9,717	9,857	10,247	10,169	10,850
Astronomy .....	255	267	303	323	293	318	337	328	368
Chemistry .....	4,426	4,609	4,757	5,104	5,137	5,180	5,329	5,278	5,536
Physics .....	3,426	3,731	3,729	4,075	4,238	4,338	4,563	4,548	4,926
Physical sciences, n.e.c. ....	19	33	32	21	49	21	18	15	20
Earth, atmospheric, & ocean sciences .....	2,877	2,852	2,960	3,033	2,868	2,799	2,903	2,957	3,085
Atmospheric sciences .....	492	495	571	546	556	525	532	550	563
Geosciences .....	1,501	1,450	1,498	1,494	1,326	1,311	1,396	1,375	1,384
Oceanography .....	659	692	692	765	796	722	751	807	875
Earth, atmos., & ocean sci., n.e.c. ....	225	215	199	228	190	241	224	225	283
Mathematical sciences .....	760	762	935	999	1,090	1,190	1,221	1,335	1,502
Computer sciences .....	1,130	1,269	1,638	1,892	2,084	2,226	2,331	2,412	2,533
Agricultural sciences .....	1,566	1,406	1,556	1,656	1,719	1,771	1,794	1,775	1,856
Biological sciences .....	10,295	10,480	10,731	11,159	11,872	12,524	13,305	13,438	14,501
Anatomy .....	195	188	186	165	207	225	247	244	281
Biochemistry .....	1,973	2,011	2,099	2,178	2,187	2,363	2,391	2,358	2,438
Biology .....	1,684	1,683	1,552	1,635	1,701	1,739	1,942	1,905	2,092
Biometry/epidemiology .....	340	297	354	328	463	468	466	490	525
Biophysics .....	233	231	237	269	285	305	332	323	371
Botany .....	493	528	461	500	529	531	516	532	554
Cell biology .....	619	664	730	889	969	1,122	1,231	1,265	1,368
Ecology .....	163	139	133	133	117	103	135	135	181
Entomology/parasitology .....	263	229	262	219	274	277	229	261	256
Genetics .....	407	406	408	475	474	485	513	524	632
Microbiology .....	1,237	1,311	1,349	1,428	1,580	1,684	1,820	1,811	1,896
Nutrition .....	478	465	540	537	566	527	551	512	568
Pathology .....	331	341	351	348	310	320	348	342	347
Pharmacology .....	772	705	837	850	829	903	996	989	1,053
Physiology .....	503	578	580	568	578	623	602	636	654
Zoology .....	272	261	239	210	290	280	342	328	382
Biosciences, n.e.c. ....	334	343	393	422	513	569	644	783	898
Psychology .....	2,141	2,061	2,048	2,031	2,049	2,170	2,215	2,491	2,682
Social sciences .....	3,195	2,948	2,931	2,650	2,608	2,673	2,790	2,896	3,129
Agricultural economics .....	446	434	499	469	466	466	446	435	427
Anthropology .....	293	258	270	291	284	285	299	281	300
Economics (except agricultural) .....	303	256	317	277	279	308	354	359	380
Geography .....	101	138	142	154	167	180	182	191	231
History and philosophy of science .....	12	12	15	18	21	24	37	25	34
Literature .....	296	163	162	155	129	76	94	140	150
Political science .....	868	795	632	560	530	623	649	607	705
Sociology .....	378	361	411	388	371	387	376	414	424
Sociology/anthropology .....	32	29	48	38	33	41	32	21	15
Social sciences, n.e.c. ....	466	482	435	300	328	283	321	423	463
Total, health fields .....	5,789	5,860	6,022	5,998	6,203	6,210	6,306	5,752	7,244
Dentistry .....	87	72	94	103	72	76	80	71	94
Neurology .....	132	190	198	213	265	341	358	385	496
Nursing .....	2,921	2,795	2,782	2,777	2,564	2,518	2,143	1,530	2,745
Pharmaceutical sciences .....	282	280	290	307	330	316	398	334	353
Preventive medicine/community health .....	947	1,025	1,034	985	1,129	1,049	1,122	1,128	1,136
Speech pathology/audiology .....	620	680	628	597	610	716	749	839	892
Veterinary sciences .....	64	85	92	92	120	112	114	128	131
Clinical medicine, n.e.c. ....	369	290	289	302	328	390	474	473	524
Health related, n.e.c. ....	367	463	615	622	785	692	868	864	873

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



**Table B-29. Full-time science and engineering graduate students supported by institutional sources  
in all institutions, by field: 1983-91**

Page 1 of 1

Field	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all surveyed fields .....	98,320	102,379	104,396	109,447	112,430	115,178	119,638	121,083	126,136
Total, science/engineering fields .....	93,310	96,931	98,724	103,527	106,472	108,899	112,752	114,261	118,425
Engineering, total .....	16,315	17,397	18,407	20,239	21,366	21,565	22,802	23,050	24,715
Aerospace .....	420	433	536	557	640	640	790	932	908
Agricultural .....	342	334	264	360	358	379	358	339	342
Biomedical .....	264	347	376	410	441	535	469	516	613
Chemical .....	2,056	2,038	2,022	2,048	2,038	2,021	1,976	2,087	2,269
Civil .....	2,861	2,987	3,155	3,552	3,602	3,850	3,910	3,886	4,217
Electrical .....	3,900	4,355	4,933	5,175	5,563	5,648	6,310	6,245	6,624
Engineering science .....	394	422	403	468	474	424	471	472	492
Industrial .....	1,055	1,142	1,229	1,342	1,508	1,486	1,667	1,699	1,899
Mechanical .....	2,869	3,126	3,133	3,683	3,841	3,783	3,854	3,919	4,254
Metallurgical/materials .....	561	590	668	806	946	895	965	974	1,118
Mining .....	137	134	128	129	141	111	138	134	136
Nuclear .....	280	307	323	357	315	322	334	325	285
Petroleum .....	177	173	178	184	249	233	282	268	273
Engineering, n.e.c. ....	999	1,008	1,059	1,168	1,250	1,238	1,278	1,254	1,285
Sciences, total .....	76,925	79,534	80,317	83,288	85,106	87,334	89,950	91,211	93,710
Physical sciences .....	13,601	13,701	13,962	14,417	14,821	14,860	15,150	14,952	15,096
Astronomy .....	278	276	275	275	314	327	366	404	378
Chemistry .....	8,632	8,558	8,603	8,706	9,025	8,894	8,983	8,724	8,823
Physics .....	4,646	4,826	5,042	5,385	5,440	5,595	5,754	5,781	5,851
Physical sciences, n.e.c. ....	45	41	41	51	42	44	47	43	44
Earth, atmospheric, & ocean sciences .....	4,269	4,388	4,170	4,390	4,226	4,343	4,318	4,263	4,361
Atmospheric sciences .....	152	147	120	126	120	164	133	142	167
Geosciences .....	3,194	3,274	3,142	3,147	2,911	2,932	2,816	2,791	2,791
Oceanography .....	386	445	448	533	561	628	735	679	691
Earth, atmos., & ocean sci., n.e.c. ....	537	522	460	584	634	599	634	651	712
Mathematical sciences .....	7,493	7,767	8,106	8,485	8,836	9,132	9,385	9,461	9,532
Computer sciences .....	3,216	3,691	4,308	4,573	5,000	5,153	5,361	5,640	5,386
Agricultural sciences .....	3,698	3,987	3,502	3,640	3,598	3,482	3,452	3,475	3,562
Biological sciences .....	16,639	17,135	17,048	17,631	17,701	17,988	18,532	18,461	19,323
Anatomy .....	510	514	533	556	553	588	590	519	510
Biochemistry .....	1,424	1,800	1,696	1,802	1,777	1,732	1,797	1,832	1,853
Biology .....	4,853	4,942	4,878	4,832	4,866	5,017	5,257	5,261	5,339
Biometry/epidemiology .....	201	174	233	314	310	303	280	314	392
Biophysics .....	99	110	84	115	108	145	146	139	160
Botany .....	1,565	1,510	1,388	1,430	1,302	1,264	1,258	1,096	1,151
Cell biology .....	379	397	442	571	681	686	707	607	1,005
Ecology .....	435	490	502	518	493	538	564	549	527
Entomology/parasitology .....	607	655	569	626	489	494	478	485	469
Genetics .....	302	315	354	434	457	418	478	477	504
Microbiology .....	1,638	1,676	1,709	1,696	1,708	1,827	1,882	1,862	1,923
Nutrition .....	951	1,029	1,010	983	1,005	929	921	989	1,018
Pathology .....	338	391	347	393	443	472	467	468	518
Pharmacology .....	742	726	751	718	781	772	804	881	883
Physiology .....	779	821	862	875	878	916	1,033	1,006	974
Zoology .....	1,348	1,261	1,201	1,232	1,239	1,201	1,182	1,056	1,141
Biosciences, n.e.c. ....	488	524	489	536	591	686	690	740	956
Psychology .....	9,824	10,251	10,509	10,941	10,776	11,288	11,764	11,997	12,425
Social sciences .....	16,255	16,614	16,712	16,211	20,148	21,088	21,988	22,962	24,025
Agricultural economics .....	638	701	692	730	641	705	755	788	797
Anthropology .....	1,654	1,774	1,728	1,880	1,903	2,030	2,097	2,305	2,489
Economics (except agricultural) .....	4,529	4,481	4,535	4,592	4,738	4,805	5,057	5,155	5,235
Geography .....	1,213	1,207	1,186	1,241	1,280	1,268	1,423	1,363	1,493
History and philosophy of science .....	125	144	139	161	186	170	190	229	226
Linguistics .....	1,018	1,056	996	982	1,052	1,199	1,222	1,211	1,303
Political science .....	4,666	4,717	4,871	5,037	5,235	5,610	5,835	6,224	6,667
Sociology .....	2,530	2,583	2,547	2,536	2,761	2,889	3,010	2,215	3,315
Sociology/anthropology .....	323	316	304	346	319	333	396	415	359
Social sciences, n.e.c. ....	1,561	1,633	1,714	1,706	2,053	2,079	2,003	2,057	2,141
Total, health fields .....	5,010	5,448	5,672	5,920	5,958	6,279	6,886	6,822	7,711
Dentistry .....	278	311	287	303	361	380	407	399	413
Neurology .....	83	82	90	129	164	195	266	321	386
Nursing .....	796	873	658	744	711	906	932	684	994
Pharmaceutical sciences .....	820	869	883	975	921	1,018	1,033	1,000	1,075
Preventive medicine/community health .....	529	602	685	793	808	721	751	893	903
Speech pathology/audiology .....	1,448	1,462	1,617	1,520	1,480	1,510	1,645	1,628	1,855
Veterinary sciences .....	189	229	293	296	332	348	399	424	392
Clinical medicine, n.e.c. ....	287	310	443	403	430	392	456	429	470
Health related, n.e.c. ....	570	710	736	757	771	809	997	1,044	1,214

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



**Table B-30. Full-time science and engineering graduate students supported by other outside sources in all institutions, by field: 1983-91**

Page 1 of 1

Field	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all surveyed fields .....	24,926	24,876	26,612	26,767	25,466	25,758	25,863	25,659	27,064
Total, science/engineering fields .....	23,298	23,229	24,952	25,182	23,942	24,468	24,425	24,335	25,491
Engineering, total .....	8,193	8,735	9,648	10,201	9,712	10,072	10,039	10,279	10,618
Aerospace .....	235	216	275	295	278	336	311	334	445
Agricultural .....	146	167	161	197	188	240	189	198	176
Biomedical .....	101	160	164	170	232	191	243	323	281
Chemical .....	1,255	1,347	1,342	1,301	1,308	1,279	1,278	1,219	1,241
Civil .....	1,339	1,356	1,311	1,248	1,065	1,108	1,200	1,241	1,338
Electrical .....	1,962	2,249	2,431	3,155	2,760	2,807	2,856	2,910	3,010
Engineering science .....	141	138	280	284	254	278	210	212	233
Industrial .....	328	380	425	449	452	506	537	558	486
Mechanical .....	1,164	1,273	1,607	1,504	1,488	1,536	1,542	1,583	1,686
Metallurgical/materials .....	586	674	764	738	721	814	836	922	918
Mining .....	102	92	98	98	75	85	60	34	67
Nuclear .....	209	202	227	237	272	255	252	242	221
Petroleum .....	185	158	192	177	198	205	137	102	127
Engineering, n.e.c. ....	421	323	351	348	401	432	385	401	389
Sciences, total .....	15,105	14,494	15,304	14,981	14,230	14,396	14,386	14,056	14,873
Physical sciences .....	1,705	1,830	2,091	1,931	1,873	1,980	2,007	1,957	2,220
Astronomy .....	27	28	37	30	40	23	22	18	32
Chemistry .....	1,093	1,173	1,316	1,277	1,184	1,200	1,283	1,236	1,445
Physics .....	580	625	719	611	633	742	698	694	737
Physical sciences, n.e.c. ....	5	4	19	13	16	15	4	9	6
Earth, atmospheric, & ocean sciences .....	1,293	1,256	1,397	1,183	1,001	1,039	999	953	990
Atmospheric sciences .....	60	71	81	76	55	54	65	61	58
Geosciences .....	899	838	921	791	645	687	663	611	612
Oceanography .....	204	192	188	123	114	122	147	132	148
Earth, atmos., & ocean sci., n.e.c. ....	130	155	227	193	187	176	124	149	172
Mathematical sciences .....	511	632	549	598	548	616	593	563	605
Computer sciences .....	834	818	1,378	1,554	1,283	1,300	1,265	1,264	1,359
Agricultural sciences .....	2,147	1,991	1,895	1,792	1,626	1,718	1,658	1,741	1,687
Biological sciences .....	3,186	3,092	3,251	3,062	3,144	3,432	3,479	3,507	3,759
Anatomy .....	48	54	42	56	45	36	50	34	48
Biochemistry .....	334	339	389	362	347	370	410	414	460
Biology .....	421	424	389	401	404	430	393	451	512
Biometry/epidemiology .....	107	89	88	86	101	130	121	91	152
Biophysics .....	25	18	12	27	41	31	83	81	77
Botany .....	433	446	469	396	360	401	392	351	371
Cell biology .....	86	81	120	122	144	130	134	181	207
Ecology .....	61	74	73	69	69	72	78	68	84
Entomology/parasitology .....	255	202	172	151	156	147	159	149	177
Genetics .....	80	68	123	101	115	131	137	126	156
Microbiology .....	283	316	373	322	350	410	367	325	341
Nutrition .....	477	416	419	441	445	504	485	590	464
Pathology .....	138	110	112	108	116	126	99	121	97
Pharmacology .....	179	191	207	193	179	208	233	205	221
Physiology .....	93	127	124	93	94	115	119	138	162
Zoology .....	113	99	79	85	74	83	73	78	87
Biosciences, n.e.c. ....	53	38	60	49	84	128	146	104	143
Psychology .....	1,352	1,379	1,378	1,414	1,281	1,059	1,126	1,097	1,075
Social sciences .....	4,077	3,496	3,365	3,447	3,474	3,252	3,259	2,974	3,179
Agricultural economics .....	377	353	309	300	329	294	350	310	278
Anthropology .....	177	155	189	149	155	170	162	220	194
Economics (except agricultural) .....	1,046	943	923	852	781	809	697	689	762
Geography .....	162	96	126	113	92	93	88	72	89
History and philosophy of science .....	22	13	13	11	30	16	18	28	19
Linguistics .....	303	320	281	323	257	236	204	182	171
Political science .....	1,191	889	850	960	1,048	997	1,040	824	970
Sociology .....	394	381	331	375	398	327	339	326	393
Sociology/anthropology .....	53	40	48	19	28	31	43	41	24
Social sciences, n.e.c. ....	352	306	297	345	356	279	318	282	279
Total, health fields .....	1,828	1,647	1,660	1,585	1,524	1,290	1,438	1,324	1,573
Dentistry .....	59	54	39	37	29	22	26	19	15
Neurology .....	37	26	18	18	36	39	67	52	72
Nursing .....	261	364	324	241	235	144	123	109	137
Pharmaceutical sciences .....	330	301	301	298	318	303	358	328	387
Preventive medicine/community health .....	383	370	423	478	467	316	366	377	437
Speech pathology/audiology .....	190	170	182	151	107	149	144	111	145
Veterinary sciences .....	59	74	55	64	78	77	81	97	124
Clinical medicine, n.e.c. ....	118	96	125	100	89	89	88	68	78
Health related, n.e.c. ....	191	192	193	200	165	151	165	163	178

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table B-31. Self-supported full-time science and engineering graduate students in all institutions, by field: 1983-91**

Page 1 of 1

Field	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all surveyed fields	81,771	79,638	78,331	79,543	80,561	79,849	80,978	84,364	92,025
Total, science/engineering fields	71,270	69,448	68,508	69,616	70,382	69,183	69,837	72,798	77,782
Engineering, total	17,453	17,441	16,623	17,410	17,702	17,530	17,447	17,713	19,837
Aerospace	307	358	312	335	461	515	542	607	620
Agricultural	133	125	130	140	160	119	152	114	127
Biomedical	414	355	348	383	372	378	425	438	467
Chemical	1,197	1,034	893	851	788	607	569	568	680
Civil	4,275	4,397	3,990	3,812	3,532	3,487	3,461	3,486	3,909
Electrical	4,380	4,496	4,997	5,098	5,666	5,699	5,710	5,792	6,397
Engineering science	142	144	116	239	189	170	150	136	163
Industrial	1,517	1,500	1,468	1,707	1,803	1,845	1,966	1,984	2,604
Mechanical	2,713	2,649	2,228	2,554	2,571	2,672	2,583	2,638	2,947
Metallurgical/materials	359	444	422	437	465	387	395	537	577
Mining	103	101	74	95	94	93	47	60	47
Nuclear	199	165	169	142	150	170	124	131	161
Petroleum	212	219	160	171	125	118	62	70	66
Engineering, n.e.c.	1,502	1,454	1,316	1,446	1,326	1,270	1,261	1,152	1,072
Sciences, total	53,817	52,007	51,885	52,206	52,680	51,653	52,390	55,085	57,945
Physical sciences	1,773	1,681	1,795	1,893	2,003	1,877	1,803	1,964	1,965
Astronomy	25	25	19	26	34	37	37	40	32
Chemistry	872	783	904	910	889	814	677	794	892
Physics	843	782	797	886	993	963	1,025	1,065	968
Physical sciences, n.e.c.	33	91	75	71	87	63	64	65	73
Earth, atmospheric, & ocean sciences	3,629	3,341	2,931	2,741	2,446	2,118	1,923	2,100	1,978
Atmospheric sciences	81	63	100	107	93	66	80	75	71
Geosciences	2,609	2,531	2,142	1,952	1,784	1,380	1,110	1,028	924
Oceanography	363	270	254	273	180	157	166	233	184
Earth, atmos., & ocean sci., n.e.c.	576	477	435	409	391	515	567	764	799
Mathematical sciences	2,193	2,150	2,228	2,308	2,570	2,576	2,496	2,475	2,620
Computer sciences	5,507	5,809	6,777	7,291	7,205	6,714	6,840	7,543	7,275
Agricultural sciences	2,515	2,467	2,238	2,226	2,120	2,101	2,097	2,061	2,131
Biological sciences	6,742	6,547	6,111	6,065	5,812	5,578	5,364	5,014	5,346
Anatomy	168	180	130	116	119	124	112	110	117
Biochemistry	247	285	279	298	303	278	224	203	216
Biology	2,043	1,916	1,711	1,689	1,683	1,679	1,726	1,584	1,551
Biometry/epidemiology	229	191	321	320	316	335	369	358	377
Biophysics	80	60	48	38	34	63	49	29	37
Botany	423	379	379	437	385	360	290	235	200
Cell biology	54	67	114	73	92	85	105	106	131
Ecology	185	174	168	132	117	123	102	138	144
Entomology/parasitology	180	178	135	111	143	143	145	102	112
Genetics	175	197	172	161	162	153	126	96	124
Microbiology	546	523	448	425	379	388	260	291	249
Nutrition	1,084	1,108	1,071	1,094	998	916	917	827	909
Pathology	249	228	217	206	224	191	235	194	204
Pharmacology	240	224	198	197	138	109	107	99	146
Physiology	391	443	420	469	446	354	303	336	370
Zoology	319	242	199	193	184	175	177	156	174
Biosciences, n.e.c.	129	152	101	106	89	102	117	150	185
Psychology	13,376	12,411	11,816	12,083	13,202	13,849	14,503	15,109	16,200
Social sciences	18,082	17,601	17,989	17,599	17,320	16,840	17,364	18,819	20,430
Agricultural economics	586	539	490	485	421	444	361	428	501
Anthropology	1,816	1,781	1,729	1,741	1,744	1,791	1,853	1,981	2,053
Economics (except agricultural)	3,265	3,091	3,163	3,238	3,187	3,099	2,980	3,013	3,353
Geography	726	734	670	600	751	674	665	754	761
History and philosophy of science	70	74	60	47	50	56	58	58	61
Linguistics	760	760	898	898	1,011	1,008	945	973	973
Political science	6,718	6,397	6,818	6,853	6,194	6,047	6,489	6,967	7,784
Sociology	1,492	1,420	1,355	1,273	1,456	1,479	1,544	1,713	1,714
Sociology/anthropology	263	219	167	181	180	161	162	291	289
Social sciences, n.e.c.	2,386	2,586	2,639	2,303	2,286	2,081	2,307	2,641	2,641
Total, health fields	10,501	10,190	9,823	9,927	10,179	10,666	11,141	11,566	14,243
Dentistry	297	335	326	373	439	445	337	323	367
Neurology	6	15	28	12	10	15	20	22	24
Nursing	2,226	2,081	1,849	1,872	2,149	1,940	2,133	1,578	2,616
Pharmaceutical sciences	336	321	335	261	255	270	328	334	457
Preventive medicine/community health	2,102	1,958	1,991	1,829	1,739	2,139	1,956	2,107	2,024
Speech pathology/audiology	2,997	2,953	3,019	3,123	2,817	2,872	3,102	3,180	3,754
Veterinary sciences	51	57	75	54	62	69	74	60	70
Clinical medicine, n.e.c.	288	334	288	322	324	362	368	432	531
Health related, n.e.c.	2,198	2,136	1,912	2,081	2,384	2,554	2,823	3,550	4,400

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table B-32. Full-time science and engineering graduate students in all institutions, by field and type of major support: 1983-91**

Page 1 of 2

Field and type of major support	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
<b>Total, all surveyed fields</b>									
Total, all types	252,846	254,735	258,241	267,075	271,772	276,225	283,849	288,981	308,669
Fellowships	21,394	21,675	22,672	23,038	22,109	22,638	23,705	24,719	27,188
Traineeships	13,574	13,491	13,469	13,439	13,792	14,238	14,189	14,005	15,560
Research assistantships	54,923	57,771	61,040	66,071	70,221	74,568	79,116	79,595	84,901
Teaching assistantships	60,138	61,344	61,928	62,640	62,932	63,240	64,544	84,194	65,538
Other types of support	102,817	100,454	99,132	101,887	102,718	101,541	102,295	106,468	115,482
<b>Sciences, total</b>									
Total, all types	176,007	176,433	179,126	183,418	186,023	188,593	193,532	197,825	206,668
Fellowships	15,147	15,357	16,170	16,587	15,924	16,735	17,298	17,981	19,667
Traineeships	7,985	7,861	7,847	7,663	8,215	8,497	8,697	8,962	9,293
Research assistantships	37,703	39,580	40,906	43,224	45,390	48,200	51,232	51,165	54,154
Teaching assistantships	47,958	48,516	48,941	49,202	49,587	49,873	51,094	51,137	51,682
Other types of support	67,214	65,119	65,262	66,742	66,927	65,288	65,211	68,580	71,872
<b>Physical sciences</b>									
Total, all types	25,205	25,852	26,669	27,764	28,414	28,574	29,207	29,042	30,131
Fellowships	1,929	2,091	1,929	1,895	1,847	1,821	1,964	2,251	2,716
Traineeships	399	357	418	524	541	502	599	659	777
Research assistantships	9,145	9,628	10,284	10,994	11,558	12,056	12,426	11,972	12,223
Teaching assistantships	11,270	11,339	11,467	11,654	11,752	11,600	11,754	11,589	11,717
Other types of support	2,462	2,437	2,571	2,697	2,716	2,595	2,464	2,571	2,698
<b>Earth, atmospheric, &amp; ocean sciences</b>									
Total, all types	12,068	11,837	11,458	11,347	10,543	10,299	10,143	10,273	10,414
Fellowships	880	962	982	848	741	779	770	795	918
Traineeships	272	178	176	149	176	153	112	84	93
Research assistantships	3,545	3,583	3,728	3,838	3,660	3,892	4,169	4,153	4,358
Teaching assistantships	2,892	2,867	2,649	2,665	2,498	2,553	2,455	2,366	2,370
Other types of support	4,479	4,247	3,923	3,847	3,468	2,922	2,637	2,855	2,675
<b>Mathematical sciences</b>									
Total, all types	10,957	11,311	11,818	12,390	13,044	13,514	13,695	13,834	14,259
Fellowships	694	766	857	909	859	939	1,001	1,118	1,356
Traineeships	124	159	149	128	158	204	212	189	220
Research assistantships	803	872	998	1,038	1,111	1,226	1,304	1,334	1,349
Teaching assistantships	6,445	6,624	6,809	7,154	7,461	7,595	7,841	7,844	7,767
Other types of support	2,891	2,890	3,005	3,161	3,455	3,550	3,337	3,349	3,567
<b>Computer sciences</b>									
Total, all types	10,687	11,587	14,101	15,310	15,572	15,393	15,797	16,859	16,552
Fellowships	468	561	781	830	784	807	847	956	901
Traineeships	50	81	73	114	103	115	134	135	122
Research assistantships	1,403	1,635	2,076	2,354	2,837	3,047	3,339	3,339	3,548
Teaching assistantships	2,411	2,748	3,216	3,251	3,404	3,432	3,458	3,661	3,484
Other types of support	6,335	6,562	7,955	8,761	8,444	7,992	8,019	8,768	8,497
<b>Agricultural sciences</b>									
Total, all types	9,926	9,851	9,191	9,314	9,063	9,072	9,001	9,052	9,212
Fellowships	593	595	600	580	476	453	517	550	482
Traineeships	231	142	120	113	119	126	97	80	107
Research assistantships	4,624	4,752	4,411	4,684	4,600	4,528	4,681	4,710	4,936
Teaching assistantships	912	872	862	790	757	862	786	821	820
Other types of support	3,566	3,490	3,198	3,147	3,111	3,103	2,920	2,891	2,893
<b>Biological sciences</b>									
Total, all types	36,962	37,234	37,141	37,917	38,529	39,522	40,680	40,420	42,929
Fellowships	3,598	3,679	3,970	4,254	4,294	4,259	4,561	4,678	4,824
Traineeships	4,354	4,333	4,238	4,190	4,424	4,596	4,676	4,859	5,087
Research assistantships	10,189	10,917	11,251	12,101	12,941	14,138	15,220	15,349	16,754
Teaching assistantships	9,585	9,520	9,432	9,081	8,752	8,630	8,907	8,491	8,794
Other types of support	9,136	8,785	8,250	8,291	8,118	7,899	7,316	7,043	7,470
<b>Psychology</b>									
Total, all types	26,693	26,102	25,751	26,469	27,308	28,366	29,608	30,694	32,382
Fellowships	1,270	1,295	1,277	1,421	1,417	1,534	1,504	1,656	1,753
Traineeships	1,383	1,477	1,599	1,325	1,238	1,241	1,182	1,121	1,230
Research assistantships	2,962	3,027	3,078	3,114	3,218	3,733	3,866	4,051	4,275
Teaching assistantships	5,007	5,048	5,182	5,365	5,365	5,500	5,763	5,746	5,815
Other types of support	16,071	15,255	14,615	15,244	16,070	16,358	17,293	18,120	19,309
<b>Social sciences</b>									
Total, all types	43,609	42,659	42,997	42,907	43,550	43,853	45,401	47,651	50,763
Fellowships	5,695	5,408	5,774	5,850	5,506	6,143	6,134	5,977	6,717
Traineeships	1,172	1,134	1,074	1,120	1,456	1,560	1,685	1,835	1,657
Research assistantships	5,032	5,166	5,080	5,101	5,465	5,580	6,227	6,257	6,711
Teaching assistantships	9,436	9,498	9,324	9,242	9,578	9,701	10,130	10,599	10,915
Other types of support	22,274	21,453	21,745	21,594	21,545	20,869	21,225	22,983	24,763

See explanatory information, if any, and SOURCE(S) at end of table.

**Table B-32. Full-time science and engineering graduate students in all institutions, by field and type of major support: 1983-91**

Page 2 of 2

Field and type of major support	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
<b>Engineering, total</b>									
Total, all types	53,931	55,157	55,938	60,227	61,885	63,187	64,546	65,692	71,230
Fellowships	4,775	4,816	4,744	4,868	4,572	4,462	4,706	5,096	5,725
Traineeships	755	733	755	836	901	922	973	989	1,144
Research assistantships	15,537	16,284	17,900	20,412	22,147	23,452	24,602	25,086	26,763
Teaching assistantships	10,056	10,559	10,769	11,100	11,104	11,170	11,130	10,886	11,327
Other types of support	22,808	22,765	21,770	23,011	23,161	23,181	23,135	23,635	26,271
<b>Chemical engineering</b>									
Total, all types	5,869	5,734	5,546	5,594	5,620	5,359	5,282	5,387	5,788
Fellowships	878	901	849	823	771	709	656	749	691
Traineeships	141	131	94	108	124	105	145	148	185
Research assistantships	2,255	2,329	2,454	2,582	2,730	2,814	2,813	2,799	2,935
Teaching assistantships	1,129	1,121	1,065	1,000	994	954	903	937	1,030
Other types of support	1,466	1,252	1,084	1,081	1,001	777	765	754	947
<b>Civil engineering</b>									
Total, all types	9,807	10,089	9,760	9,992	9,651	9,957	9,974	10,074	11,214
Fellowships	607	513	639	598	466	553	624	618	684
Traineeships	113	130	138	188	208	196	202	211	214
Research assistantships	2,245	2,440	2,417	2,788	2,908	3,072	3,042	3,095	3,562
Teaching assistantships	1,490	1,624	1,657	1,734	1,746	1,739	1,707	1,637	1,666
Other types of support	5,352	5,382	4,909	4,676	4,323	4,397	4,399	4,513	5,058
<b>Electrical engineering</b>									
Total, all types	13,203	13,857	14,752	16,222	17,040	17,653	18,396	18,567	19,988
Fellowships	1,062	1,136	1,145	1,178	1,065	1,056	1,218	1,208	1,407
Traineeships	119	114	148	165	123	140	144	173	203
Research assistantships	3,192	3,156	3,677	4,447	5,111	5,722	6,129	6,212	6,576
Teaching assistantships	3,023	3,282	3,310	3,481	3,360	3,379	3,475	3,399	3,489
Other types of support	5,807	6,169	6,472	6,951	7,381	7,355	7,430	7,575	8,313
<b>Industrial engineering</b>									
Total, all types	3,322	3,433	3,517	3,875	4,233	4,398	4,761	4,863	5,705
Fellowships	180	201	195	196	195	176	212	252	260
Traineeships	14	14	24	17	48	44	43	36	32
Research assistantships	433	563	585	716	944	1,049	1,167	1,130	1,270
Teaching assistantships	663	717	841	870	802	764	830	853	912
Other types of support	2,012	1,938	1,872	2,076	2,244	2,365	2,509	2,592	3,231
<b>Mechanical engineering</b>									
Total, all types	8,330	8,698	8,875	9,789	10,164	10,426	10,464	10,662	11,654
Fellowships	653	672	627	669	628	553	571	714	869
Traineeships	84	92	129	139	150	179	187	138	179
Research assistantships	2,371	2,663	3,260	3,666	3,930	4,069	4,248	4,238	4,633
Teaching assistantships	1,992	2,080	2,082	2,160	2,222	2,286	2,252	2,220	2,205
Other types of support	3,230	3,191	2,757	3,155	3,234	3,339	3,206	3,352	3,768
<b>Other engineering</b>									
Total, all types	13,400	13,346	13,488	14,765	15,177	15,394	15,669	16,139	16,881
Fellowships	1,395	1,393	1,289	1,404	1,447	1,415	1,425	1,555	1,814
Traineeships	264	252	222	219	248	258	252	283	331
Research assistantships	5,041	5,133	5,487	6,215	6,524	6,726	7,203	7,612	7,787
Teaching assistantships	1,759	1,735	1,814	1,855	1,980	2,048	1,963	1,640	2,025
Other types of support	4,941	4,833	4,676	5,072	4,978	4,947	4,826	4,849	4,924
<b>Total, health fields</b>									
Total, all types	22,908	23,145	23,177	23,430	23,864	24,445	25,771	25,464	30,771
Fellowships	1,472	1,502	1,756	1,583	1,613	1,441	1,701	1,642	1,796
Traineeships	4,834	4,897	4,867	4,940	4,676	4,819	4,519	4,054	5,123
Research assistantships	1,683	1,907	2,234	2,435	2,684	2,916	3,282	3,344	3,984
Teaching assistantships	2,124	2,269	2,218	2,338	2,261	2,197	2,320	2,171	2,529
Other types of support	12,795	12,570	12,100	12,134	12,630	13,072	13,949	14,253	17,339

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



Table B-33. Full-time science and engineering graduate students in all institutions, by type and source of major support: 1983-91

Page 1 of 2

Type and source of major support	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
<b>Total, all types</b>									
Total, all sources	252,846	254,735	258,241	267,075	271,772	276,225	283,849	288,981	306,669
Federal, total	47,829	47,842	48,902	51,318	53,315	55,440	57,370	57,875	63,444
Dept of Defense	7,010	7,151	7,332	7,943	8,796	9,513	9,190	8,738	9,195
Dept of HHS, total	14,985	15,113	15,634	16,271	17,040	17,876	18,446	18,279	20,594
NIH	10,840	11,000	11,128	11,895	12,903	13,753	14,473	14,731	16,033
Other HHS	4,145	4,113	4,506	4,376	4,137	4,123	3,973	3,548	4,561
NSF	9,523	9,850	10,181	10,832	11,241	11,632	11,894	11,949	12,626
USDA	NA	NA	2,180	2,347	2,696	2,607	2,745	2,719	3,065
All other Federal	16,311	15,728	13,575	13,925	13,542	13,812	15,095	16,190	17,964
Institutional support	98,320	102,379	104,396	109,447	112,430	115,178	119,638	121,083	126,136
Other outside support, total	24,826	24,876	26,614	26,767	25,466	25,758	25,863	25,659	27,064
All other U.S.	15,949	16,697	18,814	19,080	18,329	18,817	19,187	19,266	20,416
Foreign	8,977	8,179	7,798	7,687	7,137	6,941	6,676	6,393	6,648
Self-support	81,771	79,638	78,331	79,543	80,561	79,849	80,978	84,364	92,025
<b>Fellowships</b>									
Total, all sources	21,894	21,675	22,672	23,038	22,109	22,638	23,705	24,719	27,188
Federal, total	4,125	4,128	4,422	4,591	4,437	4,572	5,196	6,240	7,517
Dept of Defense	256	240	263	294	349	360	420	565	694
Dept of HHS, total	776	793	874	826	855	866	916	1,005	1,148
NIH	574	613	634	654	695	702	700	827	950
Other HHS	202	180	240	172	162	164	216	178	198
NSF	1,307	1,340	1,398	1,512	1,489	1,587	1,780	2,085	2,246
USDA	NA	NA	150	166	151	95	105	110	102
All other Federal	1,786	1,755	1,737	1,793	1,593	1,664	1,974	2,475	3,327
Institutional support	9,827	10,347	11,234	11,685	11,589	12,073	12,576	12,763	13,557
Other outside support, total	7,442	7,200	7,016	6,762	6,083	5,993	5,933	5,716	6,114
All other U.S.	3,821	4,013	4,155	4,025	3,692	3,450	3,586	3,575	3,798
Foreign	3,621	3,187	2,861	2,737	2,391	2,543	2,347	2,141	2,316
Self-support	0	0	0	0	0	0	0	0	0
<b>Traineeships</b>									
Total, all sources	13,574	13,491	13,469	13,439	13,792	14,238	14,189	14,005	15,560
Federal, total	9,154	8,989	8,755	8,601	8,713	8,588	8,457	8,300	9,807
Dept of Defense	84	62	49	79	137	133	118	105	148
Dept of HHS, total	7,661	7,513	7,399	7,274	7,199	7,176	6,820	6,647	7,893
NIH	4,483	4,295	4,090	3,945	4,232	4,120	4,096	4,384	4,829
Other HHS	3,208	3,218	3,309	3,329	2,967	3,056	2,724	2,263	3,064
NSF	61	49	56	27	63	68	84	63	98
USDA	NA	NA	71	57	87	44	49	57	33
All other Federal	1,318	1,365	1,180	1,184	1,207	1,167	1,386	1,428	1,635
Institutional support	3,316	3,511	3,720	3,885	4,173	4,685	4,811	4,904	4,937
Other outside support, total	1,104	991	994	953	906	965	921	801	816
All other U.S.	740	718	696	733	650	723	645	563	633
Foreign	364	273	298	220	256	242	276	238	183
Self-support	0	0	0	0	0	0	0	0	0
<b>Research assistantships</b>									
Total, all sources	54,923	57,771	61,040	66,071	70,221	74,569	79,116	79,595	84,901
Federal, total	29,144	29,457	30,432	32,747	34,966	38,741	38,552	38,022	40,609
Dept of Defense	3,934	4,081	4,193	4,646	5,617	5,995	5,879	5,330	5,458
Dept of HHS, total	5,999	6,335	6,860	7,676	8,412	9,318	10,227	10,138	11,000
NIH	5,440	5,752	6,107	6,967	7,587	8,537	9,297	9,150	9,869
Other HHS	549	583	753	709	825	781	930	988	1,131
NSF	8,066	8,285	8,559	9,089	9,480	9,820	9,869	9,637	10,089
USDA	NA	NA	1,826	1,971	2,336	2,316	2,465	2,425	2,802
All other Federal	11,155	10,756	8,692	9,365	9,121	9,292	10,112	10,492	11,260
Institutional support	17,943	19,701	20,417	23,046	25,043	26,571	28,826	29,583	31,433
Other outside support, total	7,830	8,613	10,191	10,278	10,212	11,256	11,738	11,990	12,859
All other U.S.	7,270	8,014	9,641	9,690	9,617	10,638	11,061	11,266	12,034
Foreign	560	599	550	583	595	618	677	724	825
Self-support	0	0	0	0	0	0	0	0	0
<b>Teaching assistantships</b>									
Total, all sources	60,138	61,344	61,028	62,640	62,932	63,240	64,544	64,194	65,538
Federal, total	501	403	562	496	439	502	486	605	554
Dept of Defense	0	0	0	0	0	0	0	0	0
Dept of HHS, total	112	71	98	110	151	141	139	116	114
NIH	75	42	59	82	123	117	129	97	80
Other HHS	37	29	39	28	28	24	10	19	24
NSF	25	28	43	75	27	58	66	86	110
USDA	NA	NA	40	33	17	44	33	44	33
All other Federal	364	304	381	278	244	259	248	359	297
Institutional support	59,246	60,504	60,844	61,616	62,012	62,251	63,504	63,077	64,401
Other outside support, total	391	437	522	528	481	487	554	512	583
All other U.S.	391	437	522	528	481	487	554	512	583
Foreign	0	0	0	0	0	0	0	0	0
Self-support	0	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE(S) at end of table.

**Table B-33. Full-time science and engineering graduate students in all institutions, by type and source of major support: 1983-91**

Page 2 of 2

Type and source of major support	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Other types of support									
Total, all sources	102,817	100,454	99,132	101,887	102,718	101,541	102,295	106,468	115,482
Federal, total	4,905	4,865	4,731	4,883	4,760	5,037	4,679	4,708	4,957
Dept of Defense	2,736	2,768	2,825	2,924	2,693	3,025	2,773	2,738	2,895
Dept of HHS, total	417	401	403	385	423	375	344	373	439
NIH	268	298	238	247	268	277	251	273	295
Other HHS	149	103	165	136	155	98	93	100	144
NSF	64	148	125	129	162	99	95	78	83
USDA	NA	NA	93	120	105	108	92	83	95
All other Federal	1,688	1,548	1,285	1,325	1,377	1,430	1,375	1,436	1,445
Institutional support	7,982	8,316	8,181	9,215	9,613	9,598	9,921	10,756	11,808
Other outside support, total	8,159	7,635	7,889	8,246	7,784	7,057	6,717	6,640	6,692
All other U.S.	3,727	3,515	3,800	4,104	3,889	3,519	3,341	3,350	3,368
Foreign	4,432	4,120	4,089	4,142	3,895	3,538	3,376	3,290	3,324
Self-support	81,771	79,638	78,331	79,543	80,561	79,849	80,978	84,364	92,025

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: NA = Not available

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



Table B-34. Full-time science graduate students in all institutions, by type and source of major support: 1983-91

Page 1 of 2

Type and source of major support	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
<b>Total, all types</b>									
Total, all sources	176,007	176,433	179,126	183,418	186,023	188,593	193,532	197,825	206,668
Federal, total	30,090	30,398	31,620	32,943	34,007	35,210	36,806	37,473	40,140
Dept of Defense	2,738	3,065	3,278	3,595	3,972	4,299	3,947	3,700	3,816
Dept of HHS, total	10,162	10,356	10,685	11,292	11,953	12,713	13,388	13,579	14,644
NIH	9,148	9,487	9,590	10,273	10,910	11,788	12,296	12,460	13,389
Other HHS	1,016	869	1,095	1,019	1,043	925	1,092	1,119	1,275
NSF	6,813	7,112	7,454	7,661	7,718	7,776	8,081	8,035	8,295
USDA	NA	NA	1,992	2,111	2,392	2,379	2,469	2,436	2,725
All other Federal	10,379	9,865	8,211	8,284	7,972	8,043	8,901	9,723	10,660
Institutional support	76,995	79,534	60,317	83,286	85,106	87,334	89,950	91,211	93,710
Other outside support, total	15,105	14,494	15,304	14,981	14,230	14,396	14,386	14,056	14,873
All other U.S.	9,051	9,070	10,248	10,027	9,653	9,874	10,236	10,116	10,765
Foreign	6,054	5,424	5,056	4,954	4,577	4,522	4,150	3,940	4,108
Self-support	53,817	52,007	51,885	52,206	52,680	51,653	52,390	55,085	57,945
<b>Fellowships</b>									
Total, all sources	15,147	15,357	16,170	16,587	15,924	16,735	17,298	17,981	19,667
Federal, total	2,965	2,965	3,207	3,396	3,252	3,331	3,728	4,428	5,117
Dept of Defense	144	87	115	167	191	188	239	282	343
Dept of HHS, total	555	579	589	586	625	602	615	746	821
NIH	453	486	477	515	544	539	526	679	736
Other HHS	102	93	112	71	81	63	89	67	65
NSF	1,030	1,053	1,112	1,228	1,183	1,219	1,344	1,508	1,557
USDA	NA	NA	117	126	115	83	98	95	81
All other Federal	1,236	1,246	1,274	1,289	1,138	1,239	1,432	1,797	2,315
Institutional support	7,587	8,043	8,584	9,051	8,924	9,551	9,738	9,873	10,581
Other outside support, total	4,615	4,349	4,379	4,140	3,748	3,853	3,832	3,680	3,969
All other U.S.	2,126	2,117	2,394	2,225	2,072	2,069	2,217	2,210	2,377
Foreign	2,489	2,232	1,985	1,915	1,676	1,784	1,615	1,470	1,592
Self-support	0	0	0	0	0	0	0	0	0
<b>Traineeships</b>									
Total, all sources	7,985	7,861	7,847	7,683	8,215	8,497	8,697	8,962	9,293
Federal, total	4,662	4,481	4,273	4,152	4,313	4,263	4,356	4,570	5,032
Dept of Defense	26	16	25	38	74	68	44	43	68
Dept of HHS, total	4,104	3,955	3,811	3,684	3,802	3,797	3,702	3,913	4,196
NIH	3,677	3,666	3,505	3,359	3,518	3,534	3,443	3,634	3,907
Other HHS	427	299	306	325	284	263	259	279	289
NSF	60	45	37	25	58	54	62	35	56
USDA	NA	NA	65	50	80	40	42	46	28
All other Federal	472	455	335	355	299	304	506	533	684
Institutional support	2,553	2,730	2,883	2,897	3,299	3,569	3,713	3,828	3,707
Other outside support, total	770	650	691	614	603	665	628	564	554
All other U.S.	476	460	463	473	448	504	449	416	460
Foreign	294	190	228	141	155	161	179	148	94
Self-support	0	0	0	0	0	0	0	0	0
<b>Research assistantships</b>									
Total, all sources	37,703	39,580	40,906	43,224	45,390	48,200	51,232	51,165	54,154
Federal, total	19,530	20,141	21,190	22,316	23,533	24,659	26,089	25,635	27,273
Dept of Defense	1,579	1,905	1,983	2,082	2,515	2,864	2,715	2,366	2,419
Dept of HHS, total	5,140	5,463	5,899	6,679	7,172	7,948	8,712	8,597	9,295
NIH	4,719	5,032	5,332	6,125	6,543	7,373	7,993	7,884	8,435
Other HHS	421	431	567	554	629	575	719	733	860
NSF	5,842	5,895	6,192	6,261	6,345	6,393	6,558	6,379	6,563
USDA	NA	NA	1,706	1,791	2,089	2,119	2,233	2,184	2,495
All other Federal	7,169	6,878	5,410	5,503	5,412	5,335	5,871	6,109	6,501
Institutional support	13,869	14,853	14,668	16,111	17,151	17,278	19,515	19,915	20,667
Other outside support, total	4,304	4,486	5,048	4,797	4,706	4,263	5,628	5,615	6,214
All other U.S.	3,852	4,055	4,712	4,396	4,301	4,832	5,162	5,112	5,649
Foreign	452	431	336	401	405	431	466	503	565
Self-support	0	0	0	0	0	0	0	0	0
<b>Teaching assistantships</b>									
Total, all sources	47,958	48,516	48,941	49,202	49,567	49,873	51,094	51,137	51,682
Federal, total	369	251	383	391	315	361	353	441	373
Dept of Defense	0	0	0	0	0	0	0	0	0
Dept of HHS, total	81	39	59	68	89	107	116	92	83
NIH	69	36	52	66	77	106	110	76	70
Other HHS	12	3	7	2	12	1	6	16	13
NSF	22	26	31	69	24	35	50	63	59
USDA	NA	NA	34	31	15	41	33	40	32
All other Federal	266	186	259	223	187	178	154	246	199
Institutional support	47,360	48,014	48,286	48,535	48,961	49,230	50,406	50,403	50,942
Other outside support, total	229	251	272	276	291	282	335	293	367
All other U.S.	229	251	272	276	291	282	335	293	367
Foreign	0	0	0	0	0	0	0	0	0
Self-support	0	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE(S) at end of table.

**Table B-34. Full-time science graduate students in all institutions, by type and source of major support: 1983-91**

Page 2 of 2

Type and source of major support	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Other types of support									
Total, all sources	67,214	85,119	65,262	66,742	66,927	65,288	65,211	68,580	71,872
Federal, total	2,564	2,560	2,567	2,688	2,594	2,596	2,280	2,399	2,345
Dept of Defense	987	1,057	1,155	1,308	1,192	1,179	949	1,009	986
Dept of HHS, total	282	310	327	275	265	259	243	231	249
NIH	228	267	224	208	228	236	224	207	221
Other HHS	54	43	103	67	37	23	19	24	28
NSF	59	93	82	78	108	75	67	50	60
USDA	NA	NA	70	113	93	96	83	71	89
All other Federal	1,236	1,100	933	914	936	987	938	1,038	961
Institutional support	5,646	5,794	5,896	6,694	6,771	6,706	6,578	7,192	7,813
Other outside support, total	5,187	4,758	4,914	5,154	4,882	4,333	3,963	3,904	3,769
All other U.S.	2,368	2,187	2,407	2,657	2,541	2,187	2,073	2,085	1,912
Foreign	2,819	2,571	2,507	2,497	2,341	2,146	1,890	1,819	1,857
Self-support	53,817	52,007	51,885	52,206	52,680	51,653	52,390	55,085	57,945

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: NA = Not available

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table B-35. Full-time engineering graduate students in all institutions, by type and source of major support: 1983-91

Page 1 of 2

Type and source of major support	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
<b>Total, all types</b>									
Total, all sources	53,931	55,157	55,938	60,227	61,885	63,187	64,546	65,692	71,230
Federal, total	11,970	11,584	11,260	12,377	13,105	14,020	14,258	14,650	16,060
Dept of Defense	4,014	3,808	3,774	4,115	4,585	4,970	4,808	4,673	4,874
Dept of HHS, total	575	544	524	536	622	628	729	788	842
NIH	477	466	455	449	508	555	644	685	751
Other HHS	98	78	69	87	114	73	85	103	91
NSF	2,680	2,696	2,686	3,128	3,474	3,808	3,766	3,868	4,274
USDA	NA	NA	164	194	256	197	210	225	280
All other Federal	4,701	4,536	4,112	4,404	4,168	4,417	4,745	5,096	5,790
Institutional support	16,315	17,397	18,407	20,239	21,368	21,565	22,802	23,050	24,715
Other outside support, total	8,193	8,735	9,648	10,201	9,712	10,072	10,039	10,279	10,618
All other U.S.	5,781	6,484	7,437	8,000	7,667	8,055	8,009	8,295	8,538
Foreign	2,432	2,251	2,211	2,201	2,045	2,017	2,030	1,984	2,080
Self-support	17,453	17,441	16,623	17,410	17,702	17,530	17,447	17,713	19,837
<b>Fellowships</b>									
Total, all sources	4,775	4,816	4,744	4,868	4,572	4,462	4,706	5,096	5,725
Federal, total	784	809	804	830	815	879	1,005	1,395	1,864
Dept of Defense	100	120	122	108	138	149	157	265	323
Dept of HHS, total	46	62	52	45	29	38	39	36	41
NIH	16	32	32	16	17	33	31	29	31
Other HHS	30	30	20	29	12	5	8	7	10
NSF	260	266	263	281	292	353	418	550	654
USDA	NA	NA	33	36	34	9	5	8	21
All other Federal	378	361	334	380	322	330	386	536	825
Institutional support	1,609	1,590	1,728	1,808	1,779	1,728	1,934	1,969	2,060
Other outside support, total	2,382	2,417	2,212	2,230	1,978	1,855	1,767	1,732	1,801
All other U.S.	1,402	1,601	1,493	1,542	1,381	1,184	1,150	1,163	1,176
Foreign	980	816	719	688	597	671	617	569	625
Self-support	0	0	0	0	0	0	0	0	0
<b>Traineeships</b>									
Total, all sources	755	733	755	836	901	922	973	989	1,144
Federal, total	266	208	211	207	257	216	252	304	396
Dept of Defense	1	20	11	34	39	50	52	41	56
Dept of HHS, total	107	74	97	103	112	68	90	120	160
NIH	100	70	91	87	99	59	68	89	127
Other HHS	7	4	6	16	13	9	22	31	33
NSF	1	4	13	1	8	8	20	26	42
USDA	NA	NA	6	6	6	3	6	7	2
All other Federal	157	110	84	63	92	87	84	110	136
Institutional support	256	269	360	403	452	515	500	525	579
Other outside support, total	233	256	184	226	192	191	221	160	169
All other U.S.	191	189	132	171	118	127	142	96	106
Foreign	42	67	52	55	74	64	79	64	63
Self-support	0	0	0	0	0	0	0	0	0
<b>Research assistantships</b>									
Total, all sources	15,537	16,284	17,900	20,412	22,147	23,452	24,602	25,086	26,763
Federal, total	8,995	8,875	8,426	9,556	10,361	10,971	11,259	11,153	11,910
Dept of Defense	2,325	2,146	2,169	2,523	3,053	3,104	3,127	2,936	3,007
Dept of HHS, total	408	397	370	376	460	515	592	619	628
NIH	352	354	327	335	377	459	537	558	585
Other HHS	56	43	43	41	83	56	55	61	43
NSF	2,411	2,370	2,355	2,811	3,119	3,405	3,289	3,245	3,508
USDA	NA	NA	96	146	205	172	191	196	252
All other Federal	3,851	3,762	3,436	3,700	3,524	3,775	4,060	4,157	4,515
Institutional support	3,293	3,724	4,586	5,675	6,559	6,796	7,620	7,973	8,759
Other outside support, total	3,249	3,885	4,888	5,181	5,227	5,685	5,723	5,960	6,094
All other U.S.	3,157	3,724	4,708	5,011	5,058	5,518	5,539	5,761	5,872
Foreign	92	161	180	170	169	167	184	199	222
Self-support	0	0	0	0	0	0	0	0	0
<b>Teaching assistantships</b>									
Total, all sources	10,056	10,559	10,769	11,100	11,104	11,170	11,130	10,886	11,327
Federal, total	40	20	94	32	24	74	74	109	124
Dept of Defense	0	0	0	0	0	0	0	0	0
Dept of HHS, total	3	2	1	1	0	2	0	2	4
NIH	3	2	1	1	0	0	0	1	4
Other HHS	0	0	0	0	0	2	0	1	0
NSF	3	2	12	5	2	23	16	21	49
USDA	NA	NA	6	1	2	3	0	4	1
All other Federal	34	16	75	25	20	46	58	82	70
Institutional support	9,886	10,392	10,470	10,854	10,928	10,907	10,880	10,566	11,039
Other outside support, total	130	147	205	214	152	189	176	211	164
All other U.S.	130	147	205	214	152	189	176	211	164
Foreign	0	0	0	0	0	0	0	0	0
Self-support	0	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE(S) at end of table.

**Table B-35. Full-time engineering graduate students in all institutions, by type and source of major support: 1983-91**

Page 2 of 2

Type and source of major support	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Other types of support									
Total, all sources	22,808	22,765	21,770	23,011	23,161	23,181	23,135	23,635	26,271
Federal, total	1,885	1,872	1,725	1,752	1,648	1,880	1,668	1,889	1,766
Dept of Defense	1,588	1,522	1,472	1,450	1,355	1,667	1,472	1,431	1,488
Dept of HHS, total	11	9	4	11	21	5	8	11	9
NIH	6	8	4	10	15	4	8	8	4
Other HHS	5	1	0	1	6	1	0	3	5
NSF	5	54	43	50	53	19	23	26	21
USDA	NA	NA	23	5	9	10	8	10	4
All other Federal	281	287	183	236	210	179	157	211	244
Institutional support	1,271	1,422	1,283	1,499	1,648	1,519	1,868	2,017	2,278
Other outside support, total	2,199	2,030	2,159	2,350	2,163	2,152	2,152	2,216	2,390
All other U.S.	881	823	899	1,062	958	1,037	1,002	1,064	1,220
Foreign	1,318	1,207	1,260	1,288	1,205	1,115	1,150	1,152	1,170
Self-support	17,453	17,441	16,623	17,410	17,702	17,530	17,447	17,713	19,837

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: NA = Not available

SOURCE: National Science Foundation/JRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table B-36. Full-time graduate students in health fields in all institutions, by type and source of major support: 1983-91

Page 1 of 2

Type and source of major support	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
<b>Total, all types</b>									
Total, all sources	22,908	23,145	23,177	23,430	23,864	24,445	25,771	25,464	30,771
Federal, total	5,769	5,860	6,022	5,998	6,203	6,210	6,306	5,752	7,244
Dept of Defense	260	278	280	233	239	244	435	365	505
Dept of HHS, total	4,248	4,213	4,425	4,443	4,465	4,535	4,329	3,912	5,108
NIH	1,217	1,047	1,083	1,173	1,485	1,410	1,533	1,586	1,913
Other HHS	3,031	3,166	3,342	3,270	2,980	3,125	2,796	2,326	3,195
NSF	30	42	41	43	49	48	47	46	57
USDA	NA	NA	24	42	48	31	46	58	60
All other Federal	1,231	1,327	1,252	1,237	1,402	1,352	1,449	1,371	1,514
Institutional support	5,010	5,448	5,672	5,920	5,958	6,279	6,886	6,822	7,711
Other outside support, total	1,628	1,647	1,660	1,585	1,524	1,290	1,438	1,324	1,573
All other U.S.	1,137	1,143	1,129	1,053	1,009	888	942	855	1,113
Foreign	491	504	531	532	515	402	496	469	460
Self-support	10,501	10,190	9,823	9,927	10,179	10,666	11,141	11,566	14,243
<b>Fellowships</b>									
Total, all sources	1,472	1,502	1,758	1,583	1,613	1,441	1,701	1,642	1,796
Federal, total	376	354	411	365	370	362	463	417	536
Dept of Defense	12	33	26	19	20	23	24	18	28
Dept of HHS, total	175	152	233	195	201	226	262	223	286
NIH	105	95	125	123	132	130	143	119	183
Other HHS	70	57	108	72	69	96	119	104	103
NSF	17	21	23	23	14	15	18	27	35
USDA	NA	NA	0	4	2	3	3	7	0
All other Federal	172	148	129	124	133	95	156	142	187
Institutional support	651	714	922	826	886	794	904	921	916
Other outside support, total	445	434	425	392	357	285	334	304	344
All other U.S.	293	295	288	258	239	197	219	202	245
Foreign	152	139	157	134	118	88	115	102	99
Self-support	0	0	0	0	0	0	0	0	0
<b>Traineeships</b>									
Total, all sources	4,834	4,897	4,867	4,940	4,676	4,819	4,519	4,054	5,123
Federal, total	4,226	4,300	4,271	4,242	4,143	4,109	3,849	3,426	4,379
Dept of Defense	57	26	13	7	24	15	22	21	24
Dept of HHS, total	3,480	3,474	3,491	3,487	3,285	3,311	3,028	2,614	3,537
NIH	706	559	494	499	615	527	585	661	795
Other HHS	2,774	2,915	2,997	2,988	2,670	2,784	2,443	1,953	2,742
NSF	0	0	6	1	17	6	2	2	0
USDA	NA	NA	0	1	1	1	1	4	3
All other Federal	689	800	761	746	816	776	796	785	815
Institutional support	507	512	477	585	422	601	588	551	651
Other outside support, total	101	85	119	113	111	109	72	77	93
All other U.S.	73	69	101	89	84	92	54	51	67
Foreign	28	16	18	24	27	17	18	26	26
Self-support	0	0	0	0	0	0	0	0	0
<b>Research assistantships</b>									
Total, all sources	1,683	1,907	2,234	2,435	2,684	2,916	3,282	3,344	3,984
Federal, total	619	641	816	875	1,072	1,111	1,204	1,234	1,426
Dept of Defense	30	30	43	41	49	27	37	28	32
Dept of HHS, total	441	475	591	621	780	855	923	922	1,077
NIH	369	366	448	507	667	705	767	728	849
Other HHS	72	109	143	114	113	150	156	194	228
NSF	13	20	12	17	16	22	22	13	18
USDA	NA	NA	24	34	42	25	41	45	55
All other Federal	135	116	146	162	185	182	181	226	244
Institutional support	787	1,024	1,183	1,260	1,333	1,497	1,691	1,695	2,007
Other outside support, total	277	242	255	300	279	308	387	415	551
All other U.S.	261	235	221	283	258	288	360	393	513
Foreign	16	7	34	17	21	20	27	22	38
Self-support	0	0	0	0	0	0	0	0	0
<b>Teaching assistantships</b>									
Total, all sources	2,124	2,269	2,218	2,338	2,261	2,197	2,320	2,171	2,529
Federal, total	92	132	85	73	100	67	59	55	57
Dept of Defense	0	0	0	0	0	0	0	0	0
Dept of HHS, total	28	30	38	41	62	32	23	22	27
NIH	3	4	6	15	46	11	19	20	16
Other HHS	25	26	32	26	16	21	4	2	11
NSF	0	0	0	1	1	0	0	2	2
USDA	NA	NA	0	1	0	0	0	0	0
All other Federal	64	102	47	30	37	35	36	31	28
Institutional support	2,000	2,098	2,088	2,227	2,123	2,114	2,218	2,108	2,420
Other outside support, total	32	39	45	38	38	16	43	8	52
All other U.S.	32	39	45	38	38	16	43	8	52
Foreign	0	0	0	0	0	0	0	0	0
Self-support	0	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE(S) at end of table.

BEST COPY AVAILABLE

95

**Table B-36. Full-time graduate students in health fields in all institutions, by type and source of major support: 1983-91**

Page 2 of 2

Type and source of major support	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Other types of support									
Total, all sources .....	12,795	12,570	12,100	12,134	12,630	13,072	13,949	14,253	17,339
Federal, total .....	456	433	439	443	518	561	731	620	846
Dept of Defense .....	161	189	198	166	146	179	352	298	421
Dept of HHS, total .....	124	82	72	99	137	111	93	131	181
NIH .....	34	23	10	29	25	37	19	58	70
Other HHS .....	90	59	62	70	112	74	74	73	111
NSF .....	0	1	0	1	1	5	5	2	2
USDA .....	NA	NA	0	2	3	2	1	2	2
All other Federal .....	171	161	169	175	231	264	280	187	240
Institutional support .....	1,065	1,100	1,022	1,022	1,194	1,273	1,475	1,547	1,717
Other outside support, total .....	773	847	818	742	739	572	602	520	533
All other U.S. ....	478	505	494	385	390	295	266	201	236
Foreign .....	295	342	322	357	349	277	336	319	297
Self-support .....	10,501	10,190	9,823	9,927	10,179	10,666	11,141	11,566	14,243

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: NA = Not available

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



**Table B-37. Full-time science and engineering graduate students with U.S. citizenship  
in all institutions, by field: 1983-91**

Page 1 of 1

Field	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all surveyed fields .....	190,810	191,150	189,898	191,881	192,930	192,500	196,844	198,742	213,354
Total, science/engineering fields .....	170,311	170,363	169,263	171,153	171,830	171,140	174,393	176,730	186,415
Engineering, total .....	31,170	31,959	31,841	33,244	33,893	33,810	34,153	34,396	37,350
Aerospace .....	1,088	1,115	1,258	1,343	1,559	1,502	1,757	1,870	2,190
Agricultural .....	425	446	414	457	478	406	361	332	358
Biomedical .....	836	901	935	1,014	1,016	1,024	1,035	1,193	1,255
Chemical .....	3,630	3,603	3,337	3,412	3,345	2,967	2,677	2,680	2,821
Civil .....	5,545	5,688	5,290	5,311	5,104	5,215	5,104	5,337	6,064
Electrical .....	7,363	7,861	8,113	8,523	8,959	9,264	9,683	9,609	10,136
Engineering science .....	861	788	795	854	782	803	702	740	774
Industrial .....	1,957	1,963	1,899	2,079	2,174	2,274	2,467	2,439	2,827
Mechanical .....	4,327	4,591	4,858	5,218	5,518	5,305	5,617	5,680	6,099
Metallurgical/materials .....	1,530	1,683	1,805	1,854	1,829	1,804	1,887	2,021	2,083
Mining .....	273	283	256	250	239	196	153	139	125
Nuclear .....	591	606	600	614	594	644	628	577	590
Petroleum .....	330	327	327	305	326	237	207	150	120
Engineering, n.e.c. ....	2,414	2,124	1,954	2,010	1,970	1,969	1,875	1,649	1,910
Sciences, total .....	139,141	138,404	137,422	137,909	137,937	137,530	140,240	142,334	149,065
Physical sciences .....	17,973	18,250	18,186	18,268	18,386	18,090	18,068	17,523	18,234
Astronomy .....	480	479	485	494	509	545	604	603	598
Chemistry .....	11,498	11,488	11,485	11,484	11,295	10,764	10,547	10,017	10,349
Physics .....	5,911	6,136	6,072	6,157	6,410	6,674	6,815	6,803	7,181
Physical sciences, n.e.c. ....	84	147	144	131	172	107	102	100	106
Earth, atmospheric, & ocean sciences .....	10,374	10,241	9,767	9,450	8,575	8,119	7,818	7,842	7,854
Atmospheric sciences .....	603	612	676	649	605	598	575	564	570
Geosciences .....	7,280	7,194	6,758	6,365	5,565	5,115	4,706	4,445	4,296
Oceanography .....	1,235	1,302	1,250	1,304	1,295	1,192	1,277	1,339	1,359
Earth, atmos., & ocean sci., n.e.c. ....	1,256	1,133	1,083	1,132	1,110	1,214	1,260	1,494	1,629
Mathematical sciences .....	6,715	6,773	7,000	7,245	7,550	7,740	7,710	7,941	8,376
Computer sciences .....	6,724	7,052	8,551	9,176	9,087	8,635	8,788	8,887	8,559
Agricultural sciences .....	7,429	7,400	6,821	6,728	6,415	6,411	6,350	6,177	6,360
Biological sciences .....	31,382	31,468	30,826	30,752	30,497	30,504	30,641	29,994	31,387
Anatomy .....	847	878	800	772	771	793	784	705	716
Biochemistry .....	3,203	3,389	3,489	3,545	3,400	3,413	3,311	3,186	3,245
Biology .....	8,045	7,864	7,437	7,307	7,302	7,339	7,606	7,415	7,738
Biometry/epidemiology .....	720	628	823	826	920	933	930	907	1,000
Biophysics .....	357	339	286	329	343	365	402	398	414
Botany .....	2,333	2,275	2,126	2,052	1,858	1,718	1,635	1,434	1,454
Cell biology .....	1,010	1,062	1,217	1,380	1,553	1,618	1,700	1,860	2,093
Ecology .....	786	790	776	757	686	713	745	739	786
Entomology/parasitology .....	1,065	1,040	904	855	767	775	718	699	679
Genetics .....	819	852	891	966	964	923	954	951	1,108
Microbiology .....	3,192	3,281	3,226	3,146	3,209	3,357	3,259	3,163	3,214
Nutrition .....	2,167	2,127	2,115	2,150	2,047	1,902	1,876	1,844	1,852
Pathology .....	851	902	839	852	848	863	858	829	824
Pharmacology .....	1,698	1,685	1,743	1,640	1,543	1,550	1,630	1,611	1,676
Physiology .....	1,554	1,714	1,721	1,687	1,646	1,561	1,507	1,535	1,525
Zoology .....	1,910	1,719	1,540	1,532	1,564	1,458	1,505	1,354	1,470
Biosciences, n.e.c. ....	845	923	891	958	1,071	1,223	1,221	1,364	1,593
Psychology .....	25,600	25,057	24,590	25,299	26,114	27,037	28,263	29,212	30,762
Social sciences .....	32,944	32,163	31,681	30,993	31,313	30,994	32,602	34,758	37,533
Agricultural economics .....	1,282	1,263	1,222	1,205	1,118	1,037	996	1,031	1,042
Anthropology .....	3,538	3,582	3,471	3,525	3,520	3,625	3,756	4,091	4,321
Economics (except agricultural) .....	5,602	5,207	4,942	4,876	4,750	4,545	4,587	4,615	4,988
Geography .....	1,816	1,803	1,764	1,724	1,865	1,808	1,932	1,951	2,159
History and philosophy of science .....	189	201	176	198	226	221	256	296	284
Linguistics .....	1,525	1,481	1,394	1,397	1,497	1,525	1,453	1,481	1,540
Political science .....	10,703	10,238	10,569	10,462	10,104	10,324	11,313	12,001	13,312
Sociology .....	3,693	3,676	3,439	3,332	3,691	3,659	3,892	4,285	4,549
Sociology/anthropology .....	542	484	437	460	434	442	499	630	566
Social sciences, n.e.c. ....	4,054	4,228	4,267	3,814	4,108	3,808	3,916	4,377	4,772
Total, health fields .....	20,499	20,787	20,635	20,728	21,100	21,360	22,451	22,012	26,939
Dentistry .....	579	640	590	639	756	767	680	628	663
Neurology .....	231	284	300	324	406	493	599	637	804
Nursing .....	6,045	5,941	5,461	5,476	5,496	5,331	5,167	3,740	6,240
Pharmaceutical sciences .....	1,139	1,126	1,142	1,145	1,131	1,093	1,206	1,117	1,272
Preventive medicine/community health .....	3,243	3,293	3,334	3,272	3,318	3,351	3,336	3,529	3,493
Speech pathology/audiology .....	5,013	5,057	5,224	5,141	4,766	4,973	5,357	5,458	6,320
Veterinary sciences .....	252	315	382	368	439	445	479	508	494
Clinical medicine, n.e.c. ....	906	912	958	932	965	1,011	1,122	1,103	1,302
Health related, n.e.c. ....	3,091	3,219	3,246	3,431	3,822	3,896	4,505	5,292	6,351

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table B-38. Full-time science and engineering graduate students without U.S. citizenship in all institutions, by field: 1983-91**

Page 1 of 1

Field	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all surveyed fields .....	62,036	63,585	68,343	75,194	78,642	83,725	87,005	90,239	95,315
Total, science/engineering fields .....	59,627	61,227	65,801	72,492	76,078	80,640	83,685	86,787	91,483
Engineering, total .....	22,761	23,198	24,097	26,983	27,992	29,577	30,393	31,296	33,880
Aerospace .....	752	739	738	811	813	1,031	1,015	1,140	1,124
Agricultural .....	341	327	353	424	446	473	490	481	469
Biomedical .....	195	220	194	280	376	431	576	588	666
Chemical .....	2,239	2,131	2,209	2,182	2,275	2,392	2,605	2,727	2,967
Civil .....	4,262	4,401	4,470	4,671	4,547	4,742	4,870	4,737	5,150
Electrical .....	5,840	5,996	6,639	7,699	8,081	8,389	8,713	8,958	9,852
Engineering science .....	495	484	469	591	591	615	557	503	590
Industrial .....	1,365	1,470	1,618	1,796	2,059	2,124	2,294	2,424	2,878
Mechanical .....	4,003	4,107	4,017	4,571	4,646	5,121	4,847	4,982	5,555
Metallurgical/materials .....	1,174	1,209	1,288	1,516	1,607	1,660	1,828	1,901	1,976
Mining .....	155	141	135	192	196	219	185	195	211
Nuclear .....	461	412	430	445	450	461	484	503	490
Petroleum .....	290	287	250	267	318	362	299	316	401
Engineering, n.e.c. ....	1,189	1,274	1,289	1,538	1,587	1,557	1,630	1,861	1,551
Sciences, total .....	36,866	38,029	41,704	45,509	48,086	51,063	53,292	55,491	57,603
Physical sciences .....	7,232	7,602	8,483	9,498	10,028	10,484	11,139	11,519	11,897
Astronomy .....	105	117	150	180	172	160	158	187	212
Chemistry .....	3,525	3,635	4,085	4,513	4,940	5,324	5,725	6,015	6,347
Physics .....	3,584	3,828	4,215	4,800	4,894	4,964	5,225	5,285	5,301
Physical sciences, n.e.c. ....	18	22	23	25	22	36	31	32	37
Earth, atmospheric, & ocean sciences .....	1,694	1,596	1,691	1,897	1,968	2,180	2,325	2,431	2,560
Atmospheric sciences .....	182	164	196	206	219	231	235	264	289
Geosciences .....	923	899	945	1,019	1,101	1,195	1,279	1,360	1,395
Oceanography .....	377	297	312	390	356	437	522	512	539
Earth, atmos., & ocean sci., n.e.c. ....	212	236	238	282	292	317	289	295	337
Mathematical sciences .....	4,242	4,538	4,818	5,145	5,494	5,774	5,985	5,893	5,883
Computer sciences .....	3,963	4,535	5,550	6,134	6,485	6,758	7,009	7,972	7,993
Agricultural sciences .....	2,497	2,451	2,370	2,586	2,648	2,681	2,651	2,875	2,878
Biological sciences .....	5,480	5,766	6,315	7,165	8,032	9,018	10,039	10,426	11,542
Anatomy .....	74	58	91	121	153	180	215	202	240
Biochemistry .....	775	846	974	1,095	1,214	1,330	1,511	1,621	1,722
Biology .....	956	1,101	1,093	1,250	1,372	1,526	1,712	1,786	1,856
Biometry/epidemiology .....	157	123	173	222	270	303	306	346	446
Biophysics .....	80	80	93	120	125	179	208	174	231
Botany .....	581	588	591	711	738	838	821	780	822
Cell biology .....	128	147	189	275	333	405	477	499	618
Ecology .....	78	87	100	100	110	123	134	151	150
Entomology/parasitology .....	240	224	234	252	295	286	291	298	335
Genetics .....	145	134	166	205	244	264	300	272	308
Microbiology .....	512	545	653	725	808	952	1,070	1,126	1,195
Nutrition .....	821	891	925	905	967	974	998	1,074	1,107
Pathology .....	205	168	188	203	245	246	291	296	342
Pharmacology .....	235	241	250	318	379	442	510	543	632
Physiology .....	212	255	265	318	350	447	550	581	625
Zoology .....	142	144	178	188	223	261	269	264	314
Biosciences, n.e.c. ....	139	134	152	157	206	262	376	413	589
Psychology .....	1,093	1,045	1,161	1,170	1,194	1,329	1,345	1,482	1,620
Social sciences .....	10,665	10,496	11,316	11,914	12,237	12,359	12,799	12,893	13,230
Agricultural economics .....	765	764	768	759	739	872	916	930	961
Anthropology .....	402	386	445	536	566	651	655	696	715
Economics (except agricultural) .....	3,541	3,564	3,996	4,083	4,235	4,476	4,501	4,601	4,742
Geography .....	388	372	360	384	425	407	426	429	415
History and philosophy of science .....	40	42	51	39	41	45	45	44	56
Linguistics .....	850	838	943	961	952	994	1,012	1,025	1,057
Political science .....	2,740	2,560	2,602	2,948	2,903	2,953	2,700	2,621	2,814
Sociology .....	1,101	1,069	1,205	1,240	1,335	1,423	1,377	1,383	1,297
Sociology/anthropology .....	129	122	128	124	126	124	134	138	121
Social sciences, n.e.c. ....	711	779	818	840	915	914	1,033	1,026	1,052
Total, health fields .....	2,409	2,358	2,542	2,702	2,764	3,085	3,320	3,452	3,832
Dentistry .....	122	132	156	177	145	156	170	164	226
Neurology .....	27	29	34	46	69	97	112	143	174
Nursing .....	159	172	152	158	163	177	164	161	252
Pharmaceutical sciences .....	629	645	647	696	693	814	911	879	1,000
Preventive medicine/community health .....	718	662	799	811	825	874	879	976	1,007
Speech pathology/audiology .....	242	208	222	250	228	274	283	280	326
Veterinary sciences .....	111	110	133	138	153	161	189	201	223
Clinical medicine, n.e.c. ....	166	118	189	195	205	222	284	299	310
Health related, n.e.c. ....	235	282	210	229	283	310	348	329	314

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table B-39. Part-time science and engineering graduate students in all institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all surveyed fields	139,530	141,714	147,191	149,367	149,669	149,527	151,012	155,365	167,022
Total, science/engineering fields	118,377	119,165	124,490	125,402	125,854	125,041	126,813	131,781	137,342
Engineering, total	37,180	37,823	40,222	41,913	42,004	39,972	39,773	41,637	43,177
Aerospace	465	486	544	650	643	690	682	856	727
Agricultural	203	181	174	173	139	160	180	148	158
Biomedical	213	224	244	255	297	300	308	331	312
Chemical	1,894	1,639	1,804	1,418	1,406	1,259	1,178	1,288	1,339
Civil	5,114	5,114	5,156	5,005	5,067	4,885	4,045	5,380	6,051
Electrical	11,913	12,341	13,274	13,577	14,174	14,184	14,659	15,016	15,284
Engineering science	905	881	834	917	970	968	818	768	790
Industrial	6,051	6,102	7,324	8,013	8,224	7,333	6,697	6,748	7,628
Mechanical	4,581	5,157	5,282	5,924	8,114	5,781	5,775	5,793	6,166
Metallurgical/materials	743	785	850	838	930	871	874	999	1,090
Mining	96	78	98	70	78	74	80	103	153
Nuclear	151	216	190	206	235	198	211	198	202
Petroleum	117	130	205	175	174	143	159	186	190
Engineering, n.e.c.	4,934	4,289	4,443	4,692	3,553	3,146	3,207	3,825	3,087
Sciences, total	81,197	81,542	84,268	83,489	83,850	85,069	86,840	90,144	94,165
Physical sciences	4,251	4,204	4,312	4,484	4,316	4,388	4,412	4,579	4,769
Astronomy	33	43	36	35	41	26	27	20	19
Chemistry	2,773	2,629	2,720	2,740	2,584	2,484	2,540	2,663	2,726
Physics	1,311	1,367	1,385	1,482	1,503	1,670	1,617	1,672	1,739
Physical sciences, n.e.c.	134	165	171	227	188	208	228	224	285
Earth, atmospheric, & ocean sciences	3,522	3,818	4,133	3,863	3,979	3,741	3,706	3,832	4,333
Atmospheric sciences	111	131	92	106	128	111	102	101	109
Geosciences	2,118	2,277	2,591	2,435	2,332	2,155	2,073	1,909	1,937
Oceanography	451	503	519	434	476	404	408	397	395
Earth, atmos., & ocean sci., n.e.c.	842	907	931	888	1,043	1,071	1,123	1,425	1,892
Mathematical sciences	6,423	6,148	5,762	5,577	5,480	5,589	5,643	5,948	5,733
Computer sciences	12,929	14,223	15,743	16,087	16,565	17,161	16,801	17,514	18,176
Agricultural sciences	2,470	2,330	2,308	2,119	2,032	2,022	2,125	2,225	2,237
Biological sciences	8,909	8,658	9,135	8,995	8,609	8,467	8,577	9,063	9,191
Anatomy	116	93	102	80	87	83	79	89	90
Biochemistry	227	227	203	245	209	190	272	214	249
Biology	4,050	3,925	4,191	4,109	3,819	3,692	3,602	3,855	3,892
Biometry/epidemiology	279	253	364	386	420	499	541	670	620
Biophysics	13	14	60	98	123	48	45	27	18
Botany	385	388	471	388	409	380	388	353	385
Cell biology	44	47	23	61	78	55	57	68	93
Ecology	163	211	152	155	167	192	230	287	290
Entomology/parasitology	170	174	204	199	182	179	172	176	157
Genetics	71	73	63	91	106	102	111	108	108
Microbiology	558	500	568	503	438	465	498	500	528
Nutrition	1,363	1,259	1,274	1,268	1,274	1,352	1,385	1,350	1,292
Pathology	393	384	319	328	305	274	267	278	351
Pharmacology	136	124	114	122	150	140	132	143	128
Physiology	228	191	225	215	217	212	149	160	169
Zoology	378	440	417	363	326	315	315	420	408
Biosciences, n.e.c.	335	355	385	388	299	289	334	365	413
Psychology	14,219	14,835	15,422	14,948	15,019	15,788	16,438	17,549	19,210
Social sciences	28,474	27,328	27,453	27,416	27,850	27,913	29,138	29,434	30,516
Agricultural economics	248	252	278	284	346	350	364	312	363
Anthropology	1,704	1,622	1,715	1,744	1,624	1,669	1,717	1,678	1,659
Economics (except agricultural)	3,921	3,736	3,492	3,144	3,035	3,015	3,055	2,970	2,979
Geography	858	860	812	947	933	993	1,153	1,163	1,211
History and philosophy of science	24	31	45	29	27	22	39	29	43
Linguistics	647	841	718	751	833	724	875	933	655
Political science	14,607	13,123	13,841	13,841	14,601	14,607	15,290	15,132	15,803
Sociology	2,126	1,995	1,923	1,882	1,919	1,963	2,089	2,071	2,468
Sociology/anthropology	529	469	489	437	422	425	389	415	341
Social sciences, n.e.c.	3,810	4,397	4,160	4,357	4,110	4,145	4,167	4,731	4,794
Total, health fields	21,153	22,549	22,701	23,965	23,815	24,486	24,399	23,584	29,680
Dentistry	75	82	90	113	148	155	148	129	141
Neurology	3	4	2	10	19	10	21	22	28
Nursing	10,741	11,874	11,470	11,878	11,536	11,620	11,303	10,272	15,797
Pharmaceutical sciences	873	748	764	841	783	706	800	794	880
Preventive medicine/community health	2,718	2,886	3,154	3,147	3,353	3,454	3,474	3,738	4,095
Speech pathology/audiology	2,581	2,480	2,540	2,566	2,408	2,421	2,448	2,697	2,673
Veterinary sciences	103	132	122	124	139	146	133	191	177
Clinical medicine, n.e.c.	553	526	564	543	570	573	410	379	452
Health related, n.e.c.	3,506	3,817	3,995	4,743	4,859	5,401	5,662	5,362	5,437

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table B-40. Part-time science and engineering graduate students in all institutions, by geographic distribution: 1983-91**

Page 1 of 1

Geographic distribution	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all institutions .....	139,530	141,714	147,191	149,367	149,669	149,527	151,012	155,365	167,022
New England .....	11,202	9,313	9,774	9,447	9,345	11,221	10,586	10,866	11,358
Connecticut .....	3,172	2,676	2,740	2,889	2,770	3,059	3,113	3,113	3,132
Maine .....	97	118	118	117	169	145	162	185	160
Massachusetts .....	7,058	5,818	6,127	5,818	5,683	6,992	6,328	6,768	7,114
New Hampshire .....	190	110	143	135	98	254	310	277	248
Rhode Island .....	479	356	449	469	449	567	516	410	552
Vermont .....	208	235	197	219	196	204	157	133	152
Middle Atlantic .....	35,676	32,056	32,172	32,400	30,475	34,516	33,501	34,472	36,228
New Jersey .....	6,135	6,240	8,135	5,930	5,817	6,320	5,680	6,070	6,198
New York .....	21,915	19,314	19,431	19,621	18,000	20,371	20,186	20,484	21,528
Pennsylvania .....	7,626	6,502	6,606	6,849	6,658	7,825	7,635	7,908	8,502
East North Central .....	20,293	19,321	19,134	19,949	20,269	21,781	22,924	23,514	24,958
Illinois .....	6,158	5,787	6,105	5,896	6,142	6,906	7,437	7,643	7,771
Indiana .....	2,565	1,703	1,258	1,738	1,718	1,838	1,916	2,084	2,186
Michigan .....	3,955	4,256	4,317	4,515	4,558	4,583	5,191	5,542	5,811
Ohio .....	5,392	5,804	5,681	5,987	5,985	6,134	5,913	6,013	6,458
Wisconsin .....	2,223	1,791	1,775	1,813	1,866	2,340	2,467	2,232	2,732
West North Central .....	6,839	8,163	7,154	7,278	7,418	8,606	9,104	9,290	10,142
Iowa .....	898	859	874	957	958	1,031	1,005	1,136	1,193
Kansas .....	1,323	1,271	1,852	1,820	1,954	2,047	2,249	2,220	2,392
Minnesota .....	1,275	822	1,041	909	813	1,512	1,690	1,795	2,043
Missouri .....	2,243	2,153	2,250	2,419	2,514	2,736	2,755	2,761	2,947
Nebraska .....	757	693	730	783	778	871	944	932	1,120
North Dakota .....	187	180	181	159	128	144	165	131	159
South Dakota .....	206	185	226	231	273	265	296	295	288
South Atlantic .....	19,505	20,011	21,129	22,150	23,405	24,382	24,530	25,699	27,211
Delaware .....	404	413	388	389	446	354	300	224	394
District of Columbia .....	4,787	5,224	5,211	5,762	5,818	5,145	4,860	4,765	4,899
Florida .....	3,385	3,072	3,630	3,597	4,383	5,043	4,986	5,965	6,453
Georgia .....	1,398	1,485	1,516	1,600	1,822	2,082	2,269	2,103	2,482
Maryland .....	3,671	3,782	3,690	3,730	3,687	4,187	4,355	4,353	4,420
North Carolina .....	1,756	1,728	1,736	1,827	1,872	1,864	1,962	2,097	2,213
South Carolina .....	910	934	882	991	1,084	1,003	1,045	1,053	1,119
Virginia .....	2,253	2,517	3,252	3,452	3,447	3,723	3,839	4,147	4,192
West Virginia .....	951	856	822	802	848	981	914	992	1,059
East South Central .....	4,963	4,629	4,774	4,964	5,013	6,299	6,829	6,798	7,341
Alabama .....	1,110	1,120	1,245	1,293	1,483	1,712	1,860	2,259	2,430
Kentucky .....	1,131	871	861	889	971	1,511	1,647	1,347	1,508
Mississippi .....	548	712	727	683	634	725	782	544	626
Tennessee .....	2,174	1,926	1,941	2,099	1,945	2,351	2,540	2,648	2,777
West South Central .....	13,085	10,836	11,404	11,213	11,460	13,332	14,061	15,002	17,003
Arkansas .....	632	357	398	375	465	821	669	678	1,063
Louisiana .....	1,485	1,243	1,171	1,054	907	1,030	1,015	1,165	1,481
Oklahoma .....	962	908	1,384	1,281	1,777	1,757	1,838	1,996	2,268
Texas .....	9,986	8,328	8,451	8,503	8,311	9,724	10,539	11,165	12,191
Mountain .....	5,644	5,768	8,524	6,587	6,696	6,843	7,252	8,086	9,187
Arizona .....	1,867	1,884	2,175	1,852	1,945	1,820	2,054	2,299	2,340
Colorado .....	1,407	1,341	1,419	1,837	1,744	1,857	1,947	2,470	3,298
Idaho .....	351	409	480	452	512	568	634	717	872
Montana .....	80	91	133	121	138	151	171	142	187
Nevada .....	165	129	119	95	116	347	329	529	357
New Mexico .....	828	759	781	784	827	904	1,001	868	957
Utah .....	905	1,032	1,126	1,170	1,223	1,028	944	919	1,138
Wyoming .....	41	123	281	276	191	188	172	141	238
Pacific .....	21,529	18,826	20,202	20,355	20,513	21,787	21,465	20,950	22,833
Alaska .....	230	7	169	97	184	270	190	302	309
California .....	18,708	18,739	18,045	18,321	18,254	18,944	18,820	18,018	19,838
Hawaii .....	280	242	238	250	295	307	318	326	325
Oregon .....	656	801	557	565	624	700	714	781	866
Washington .....	1,655	1,237	1,193	1,122	1,176	1,566	1,423	1,523	1,530
Outlying areas .....	784	730	775	787	750	760	760	688	726
State unknown 2/ .....	0	14,061	14,149	14,237	14,325	0	0	0	0

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

2/ These numbers represent the total of all nonsampled master's-granting institutions.

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



Table B-41. Male part-time science and engineering graduate students in all institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all surveyed fields	83,436	84,037	87,827	88,414	88,593	86,492	86,680	89,059	93,260
Total, science/engineering fields	79,571	80,081	83,446	83,936	83,958	82,013	82,220	84,703	88,275
Engineering, total	33,000	33,326	35,346	36,421	36,326	34,409	34,274	35,623	37,072
Aerospace	422	440	507	599	586	631	622	768	656
Agricultural	188	166	154	150	128	146	162	128	142
Biomedical	170	180	196	207	248	236	229	244	226
Chemical	1,447	1,399	1,354	1,137	1,136	976	945	1,038	1,067
Civil	4,549	4,524	4,501	4,345	4,358	4,136	4,159	4,476	4,928
Electrical	10,823	11,299	12,064	12,144	12,640	12,603	12,982	13,263	13,581
Engineering science	750	734	712	772	810	829	709	646	684
Industrial	5,126	5,041	6,068	6,537	8,677	5,899	5,435	5,461	6,285
Mechanical	4,259	4,762	4,830	5,392	5,555	5,201	5,227	5,205	5,585
Metallurgical/materials	619	671	686	684	770	694	703	797	849
Mining	90	75	96	69	73	68	74	92	135
Nuclear	141	198	174	182	211	172	189	171	170
Petroleum	108	122	186	165	163	125	151	177	176
Engineering, n.e.c.	4,308	3,715	3,816	4,009	2,973	2,693	2,667	3,157	2,588
Sciences, total	46,571	46,755	48,100	47,515	47,632	47,604	47,946	49,080	51,203
Physical sciences	3,207	3,143	3,233	3,362	3,230	3,257	3,270	3,349	3,433
Astronomy	26	40	32	30	36	22	23	16	16
Chemistry	1,941	1,814	1,921	1,917	1,796	1,875	1,731	1,786	1,770
Physics	1,147	1,183	1,173	1,268	1,273	1,438	1,364	1,397	1,457
Physical sciences, n.e.c.	93	106	107	147	125	122	152	150	190
Earth, atmospheric, & ocean sciences	2,578	2,784	3,019	2,810	2,882	2,660	2,575	2,637	3,010
Atmospheric sciences	99	114	74	88	103	95	86	91	96
Geosciences	1,559	1,714	1,968	1,853	1,760	1,591	1,543	1,404	1,451
Oceanography	335	351	357	292	334	284	262	257	234
Earth, atmos., & ocean sci., n.e.c.	585	605	620	577	680	690	684	685	1,229
Mathematical sciences	4,137	3,958	3,603	3,497	3,440	3,526	3,574	3,773	3,658
Computer sciences	6,930	10,080	11,336	11,682	11,988	12,341	12,147	12,854	13,436
Agricultural sciences	1,850	1,762	1,711	1,550	1,444	1,396	1,490	1,522	1,522
Biological sciences	4,336	4,234	4,420	4,326	4,244	3,944	3,917	4,156	4,170
Anatomy	74	50	60	46	45	49	40	42	43
Biochemistry	123	136	117	147	115	89	167	122	149
Biology	2,109	2,012	2,153	2,102	2,040	1,888	1,785	1,878	1,878
Biometry/epidemiology	123	119	182	181	198	211	200	287	273
Biophysics	10	12	44	73	95	37	29	16	17
Botany	232	248	276	246	254	233	245	210	227
Cell biology	26	33	16	35	44	32	31	41	48
Ecology	109	155	100	86	86	99	125	147	148
Entomology/parasitology	121	124	139	140	130	129	124	121	110
Genetics	25	30	30	47	53	50	50	48	50
Microbiology	261	233	268	243	212	216	230	238	240
Nutrition	266	247	230	200	252	241	261	281	253
Pathology	215	202	153	181	155	137	118	138	166
Pharmacology	85	75	65	73	93	96	83	89	72
Physiology	145	117	130	119	125	111	79	77	78
Zoology	239	270	260	219	200	202	206	260	236
Biosciences, n.e.c.	173	171	199	188	147	124	144	161	182
Psychology	5,248	5,427	5,387	5,115	5,119	5,277	5,282	5,184	5,728
Social sciences	18,285	15,381	15,391	15,173	15,285	15,203	15,691	15,605	16,246
Agricultural economics	186	187	207	210	267	264	275	232	257
Anthropology	710	636	721	665	616	643	668	639	672
Economics (except agricultural)	2,854	2,709	2,492	2,200	2,120	2,102	2,110	2,069	2,085
Geography	560	554	555	619	584	668	750	745	769
History and philosophy of science	16	21	25	19	14	15	26	15	25
Linguistics	192	287	217	236	272	236	269	271	357
Political science	8,472	7,618	7,927	7,893	8,202	8,013	8,354	8,075	8,339
Sociology	925	842	817	806	785	853	884	846	993
Sociology/anthropology	269	220	225	208	194	174	157	175	146
Social sciences, n.e.c.	2,101	2,299	2,205	2,327	2,231	2,235	2,198	2,538	2,603
Total, health fields	3,865	3,956	4,181	4,478	4,635	4,479	4,460	4,356	4,985
Dentistry	55	55	64	88	105	106	93	87	94
Neurology	3	3	2	5	12	1	13	8	9
Nursing	389	429	475	483	547	509	558	442	709
Pharmaceutical sciences	566	458	468	527	456	393	442	456	485
Preventive medicine/community health	1,030	1,119	1,235	1,231	1,410	1,338	1,217	1,347	1,534
Speech pathology/audiology	282	339	318	315	226	242	214	255	250
Veterinary sciences	63	81	71	87	79	73	70	97	92
Clinical medicine, n.e.c.	228	203	197	211	207	178	130	135	152
Health related, n.e.c.	1,249	1,269	1,351	1,571	1,593	1,639	1,723	1,529	1,660

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



Table B-42. Female part-time science and engineering graduate students in all institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all surveyed fields	56,094	57,677	59,564	60,953	61,076	63,035	64,332	66,306	73,762
Total, science/engineering fields	38,806	39,084	41,044	41,466	41,896	43,028	44,393	47,078	49,067
Engineering, total	4,180	4,297	4,876	5,482	5,678	5,563	5,499	6,014	6,105
Aerospace	43	46	37	52	57	59	60	86	71
Agricultural	15	15	20	23	11	14	18	18	16
Biomedical	43	44	46	48	51	64	79	87	86
Chemical	247	240	250	251	270	283	233	250	272
Civil	585	590	655	660	709	729	786	904	1,123
Electrical	1,090	1,042	1,210	1,433	1,534	1,581	1,677	1,753	1,703
Engineering science	155	147	122	145	160	139	109	122	106
Industrial	925	1,061	1,256	1,476	1,547	1,434	1,262	1,287	1,343
Mechanical	322	395	452	532	559	580	548	588	581
Metallurgical/materials	124	114	164	154	180	177	171	202	241
Mining	6	3	2	1	5	6	6	11	18
Nuclear	10	18	16	24	24	26	22	27	32
Petroleum	9	8	19	10	11	18	8	9	14
Engineering, n.e.c.	626	574	627	683	580	453	520	668	499
Sciences, total	34,626	34,787	36,168	35,974	36,218	37,465	38,894	41,064	42,962
Physical sciences	1,044	1,061	1,079	1,122	1,086	1,131	1,142	1,230	1,336
Astronomy	7	3	4	5	5	4	4	4	3
Chemistry	832	815	799	823	788	809	809	877	956
Physics	164	184	212	214	230	232	253	275	282
Physical sciences, n.e.c.	41	59	64	80	63	86	76	74	95
Earth, atmospheric, & ocean sciences	944	1,034	1,114	1,053	1,097	1,081	1,131	1,195	1,323
Atmospheric sciences	12	17	18	18	20	16	16	10	13
Geosciences	559	563	623	582	572	564	530	505	486
Oceanography	116	152	162	142	142	120	146	140	161
Earth, atmos., & ocean sci., n.e.c.	257	302	311	311	363	381	439	540	663
Mathematical sciences	2,286	2,190	2,159	2,080	2,040	2,063	2,069	2,175	2,075
Computer sciences	3,999	4,143	4,407	4,405	4,577	4,820	4,654	4,660	4,740
Agricultural sciences	620	568	597	539	588	626	635	703	715
Biological sciences	4,573	4,424	4,715	4,669	4,365	4,523	4,660	4,907	5,021
Anatomy	42	43	42	34	42	34	39	47	47
Biochemistry	104	91	88	98	94	101	105	92	100
Biology	1,941	1,913	2,038	2,007	1,779	1,804	1,817	1,977	2,014
Biometry/epidemiology	156	134	182	205	222	288	341	383	347
Biophysics	3	2	16	25	28	11	16	11	1
Botany	153	140	195	140	155	147	143	143	158
Cell biology	18	14	7	26	34	23	26	27	45
Ecology	54	56	52	69	81	93	105	140	142
Entomology/parasitology	49	50	65	59	52	50	48	55	47
Genetics	46	43	33	44	53	52	61	60	58
Microbiology	297	267	302	260	226	249	268	262	288
Nutrition	1,097	1,012	1,044	1,066	1,022	1,111	1,124	1,069	1,039
Pathology	178	182	166	147	150	137	149	140	185
Pharmacology	51	49	49	49	57	44	49	54	56
Physiology	83	74	95	96	92	101	70	83	91
Zoology	139	170	157	144	126	113	109	160	172
Biosciences, n.e.c.	162	184	166	200	152	165	190	204	231
Psychology	8,971	9,408	10,035	9,833	9,300	10,511	11,156	12,365	13,482
Social sciences	12,189	11,959	12,062	12,243	12,560	12,710	13,447	13,829	14,270
Agricultural economics	62	71	71	74	79	86	89	80	106
Anthropology	994	986	994	1,079	1,008	1,026	1,049	1,039	987
Economics (except agricultural)	1,067	1,027	1,000	944	915	913	945	901	894
Geography	298	306	257	328	349	325	403	418	442
History and philosophy of science	8	10	20	10	13	7	13	14	18
Linguistics	455	554	501	515	561	488	606	662	498
Political science	6,135	5,505	5,914	5,958	6,399	6,594	6,936	7,057	7,464
Sociology	1,201	1,153	1,106	1,076	1,134	1,110	1,205	1,225	1,475
Sociology/anthropology	260	249	244	229	228	251	232	240	195
Social sciences, n.e.c.	1,709	2,096	1,955	2,030	1,879	1,910	1,969	2,193	2,191
Total, health fields	17,288	18,593	18,520	19,487	19,180	20,007	19,939	19,228	24,695
Dentistry	20	27	26	25	43	49	55	42	47
Neurology	0	1	0	5	7	9	8	14	19
Nursing	10,352	11,445	10,995	11,415	10,989	11,111	10,745	9,830	15,088
Pharmaceutical sciences	307	290	296	314	327	313	358	338	395
Preventive medicine/community health	1,688	1,767	1,919	1,916	1,943	2,116	2,257	2,391	2,561
Speech pathology/audiology	2,299	2,141	2,222	2,251	2,182	2,179	2,234	2,442	2,423
Veterinary sciences	40	51	51	57	60	73	63	94	85
Clinical medicine, n.e.c.	325	323	367	332	383	395	280	244	300
Health related, n.e.c.	2,257	2,548	2,644	3,172	3,266	3,762	3,939	3,833	3,777

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table B-43. Part-time science and engineering graduate students in public institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all surveyed fields .....	84,961	87,005	90,940	93,443	94,635	95,220	99,274	103,690	111,584
Total, science/engineering fields .....	71,023	72,273	76,055	77,437	78,089	78,242	82,094	87,538	90,883
Engineering, total .....	19,777	20,019	21,920	23,012	24,093	23,124	24,448	26,408	27,670
Aerospace .....	287	329	350	403	419	408	408	574	553
Agricultural .....	203	181	174	173	139	160	180	146	158
Biomedical .....	122	120	111	143	146	170	207	190	175
Chemical .....	1,092	1,050	1,060	901	859	830	813	957	976
Civil .....	3,134	3,278	3,417	3,316	3,649	3,433	3,680	3,899	4,386
Electrical .....	5,108	5,353	5,390	6,633	7,451	7,210	7,648	8,081	8,393
Engineering science .....	588	582	534	625	651	653	737	708	714
Industrial .....	2,214	2,405	2,978	3,214	3,219	3,260	3,602	3,716	4,439
Mechanical .....	2,619	2,907	3,104	3,585	3,741	3,480	3,450	3,696	4,155
Metallurgical/materials .....	352	415	448	448	470	456	440	561	640
Mining .....	89	73	93	65	74	70	75	69	69
Nuclear .....	141	215	189	205	234	192	201	187	194
Petroleum .....	29	46	137	138	116	113	113	153	162
Engineering, n.e.c. ....	3,819	3,065	2,935	3,163	2,925	2,669	2,894	3,471	2,656
Sciences, total .....	51,246	52,254	54,135	54,425	53,996	55,118	57,646	61,130	63,213
Physical sciences .....	2,811	2,884	3,037	3,084	3,064	3,173	3,188	3,399	3,446
Astronomy .....	31	39	32	31	37	25	22	18	17
Chemistry .....	1,770	1,706	1,816	1,790	1,747	1,679	1,689	1,817	1,800
Physics .....	876	974	1,019	1,068	1,120	1,279	1,269	1,360	1,378
Physical sciences, n.e.c. ....	134	165	170	205	160	190	208	204	251
Earth, atmospheric, & ocean sciences .....	3,093	3,338	3,658	3,468	3,495	3,303	3,237	3,334	3,763
Atmospheric sciences .....	100	106	87	83	86	72	84	84	97
Geosciences .....	1,882	2,049	2,370	2,261	2,160	1,997	1,886	1,750	1,803
Oceanography .....	411	435	450	408	414	349	345	335	321
Earth, atmos., & ocean sci., n.e.c. ....	700	748	751	716	835	885	922	1,165	1,542
Mathematical sciences .....	4,165	4,053	3,984	4,089	4,013	4,172	4,226	4,548	4,339
Computer sciences .....	6,661	7,046	7,603	7,787	7,792	8,116	8,502	8,802	9,402
Agricultural sciences .....	2,452	2,312	2,288	2,099	1,998	1,985	2,109	2,208	2,207
Biological sciences .....	6,568	6,388	6,925	6,780	6,526	6,546	6,628	6,923	7,054
Anatomy .....	73	73	70	56	55	56	59	65	76
Biochemistry .....	147	125	120	173	134	133	198	167	172
Biology .....	2,864	2,807	3,077	2,995	2,844	2,901	2,820	2,960	3,093
Biometry/epidemiology .....	173	163	191	250	256	324	334	396	355
Biophysics .....	12	11	56	97	118	46	43	22	13
Botany .....	355	362	453	371	390	363	362	308	344
Cell biology .....	29	29	16	47	61	52	57	60	69
Ecology .....	141	189	130	133	139	136	174	203	206
Entomology/parasitology .....	169	173	203	199	182	178	171	174	155
Genetics .....	28	19	27	30	42	53	44	41	38
Microbiology .....	432	358	447	388	331	366	403	382	386
Nutrition .....	1,057	967	967	976	1,018	1,076	1,095	1,091	1,042
Pathology .....	235	232	238	208	181	141	161	180	242
Pharmacology .....	98	66	77	87	99	100	102	109	100
Physiology .....	154	142	174	161	169	155	116	131	142
Zoology .....	348	396	389	339	299	290	301	402	387
Biosciences, n.e.c. ....	253	256	290	270	208	176	188	232	234
Psychology .....	7,648	7,883	8,409	8,240	8,298	8,502	8,896	9,792	9,943
Social sciences .....	17,848	18,350	18,253	18,868	18,810	19,321	20,860	22,124	23,059
Agricultural economics .....	246	250	276	283	345	350	384	312	363
Anthropology .....	1,324	1,277	1,332	1,392	1,364	1,333	1,405	1,423	1,413
Economics (except agricultural) .....	2,093	2,131	2,018	2,067	1,917	1,978	2,000	2,081	2,090
Geography .....	831	833	786	926	902	966	1,133	1,145	1,182
History and philosophy of science .....	20	27	27	22	19	19	34	26	38
Linguistics .....	458	517	496	543	589	552	663	762	640
Political science .....	8,248	8,462	8,789	9,076	9,052	9,493	10,316	10,895	11,468
Sociology .....	1,542	1,441	1,436	1,428	1,470	1,571	1,707	1,697	2,095
Sociology/anthropology .....	198	189	186	194	193	242	238	248	170
Social sciences, n.e.c. ....	2,888	3,223	2,907	2,937	2,959	2,817	3,000	3,535	3,600
Total, health fields .....	13,938	14,732	14,885	16,006	16,546	16,978	17,180	16,152	20,701
Dentistry .....	41	43	48	84	105	112	94	91	108
Neurology .....	3	3	2	3	2	3	13	12	12
Nursing .....	7,502	8,260	7,894	8,432	8,497	8,750	8,572	7,535	11,646
Pharmaceutical sciences .....	266	276	334	349	348	361	398	387	435
Preventive medicine/community health .....	1,380	1,385	1,513	1,578	1,636	1,908	1,987	2,365	2,723
Speech pathology/audiology .....	2,153	2,041	2,012	2,102	1,902	1,909	1,913	2,072	2,043
Veterinary sciences .....	103	129	119	121	136	146	133	183	169
Clinical medicine, n.e.c. ....	384	369	426	398	426	422	308	289	310
Health related, n.e.c. ....	2,106	2,226	2,537	2,939	3,294	3,368	3,762	3,218	3,255

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table B-44. Part-time science and engineering graduate students in private institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all surveyed fields .....	54,569	54,709	56,251	55,924	55,034	54,307	51,738	51,675	55,438
Total, science/engineering fields .....	47,354	48,892	48,435	47,965	47,765	46,799	44,519	44,243	46,459
Engineering, total .....	17,403	17,604	18,302	18,901	17,911	16,848	15,325	15,229	15,507
Aerospace .....	198	157	194	247	224	282	274	282	174
Agricultural .....	0	0	0	0	0	0	0	0	0
Biomedical .....	91	104	133	112	151	130	101	141	137
Chemical .....	602	589	544	517	547	429	385	331	363
Civil .....	1,980	1,836	1,739	1,689	1,418	1,432	1,285	1,431	1,665
Electrical .....	6,805	6,988	8,884	8,944	6,723	6,974	7,011	6,535	8,891
Engineering science .....	317	299	300	292	319	315	81	60	79
Industrial .....	3,837	3,697	4,346	4,799	5,005	4,053	3,085	3,032	3,189
Mechanical .....	1,982	2,250	2,178	2,339	2,373	2,301	2,325	2,097	2,011
Metallurgical/materials .....	391	370	402	390	460	415	434	438	450
Mining .....	7	5	5	5	4	4	5	34	84
Nuclear .....	10	1	1	1	1	6	10	11	8
Petroleum .....	88	84	68	37	58	30	46	33	28
Engineering, n.e.c. ....	1,115	1,224	1,508	1,529	628	477	313	354	431
Sciences, total .....	29,951	29,288	30,133	29,064	29,854	29,951	29,194	29,014	30,952
Physical sciences .....	1,440	1,320	1,275	1,390	1,252	1,215	1,224	1,180	1,223
Astronomy .....	2	4	4	4	4	1	5	2	2
Chemistry .....	1,003	923	904	950	837	805	851	846	926
Physics .....	435	393	366	414	383	391	348	312	361
Physical sciences, n.e.c. ....	0	0	1	22	28	18	20	20	34
Earth, atmospheric, & ocean sciences .....	419	480	475	395	484	438	469	498	570
Atmospheric sciences .....	1	25	5	23	42	39	18	17	12
Geosciences .....	236	228	221	174	172	158	187	158	134
Oceanography .....	40	68	69	26	62	55	63	62	71
Earth, atmos., & ocean sci., n.e.c. ....	142	159	180	172	208	186	201	260	293
Mathematical sciences .....	2,258	2,095	1,778	1,488	1,467	1,417	1,417	1,400	1,394
Computer sciences .....	6,268	7,177	8,140	8,300	8,773	9,045	8,299	8,712	8,774
Agricultural sciences .....	18	18	42	20	34	37	16	17	30
Biological sciences .....	2,341	2,270	2,210	2,215	2,083	1,921	1,949	2,140	2,137
Anatomy .....	43	20	32	24	32	27	20	24	14
Biochemistry .....	80	102	83	72	75	57	74	47	77
Biology .....	1,186	1,118	1,114	1,114	975	791	782	895	763
Biometry/epidemiology .....	106	90	173	136	164	175	207	274	285
Biophysics .....	1	3	4	1	5	2	2	5	5
Botany .....	30	26	18	15	19	17	26	45	41
Cell biology .....	15	18	7	14	17	3	0	8	24
Ecology .....	22	22	22	22	28	56	56	84	84
Entomology/parasitology .....	1	1	1	0	0	1	1	2	2
Genetics .....	43	54	36	61	64	49	67	67	70
Microbiology .....	126	142	121	115	107	99	95	118	142
Nutrition .....	306	292	307	290	256	276	290	259	250
Pathology .....	158	152	81	120	124	133	106	98	109
Pharmacology .....	38	38	37	35	51	40	30	34	28
Physiology .....	74	49	51	54	48	57	33	29	27
Zoology .....	30	44	28	24	27	25	14	18	21
Biosciences, n.e.c. ....	82	99	95	118	91	113	146	133	179
Psychology .....	6,571	6,952	7,013	6,708	6,721	7,286	7,542	7,757	9,267
Social sciences .....	10,826	8,976	9,200	8,548	9,040	8,592	8,278	7,310	7,457
Agricultural economics .....	2	2	2	1	1	0	0	0	0
Anthropology .....	390	345	389	352	260	336	312	255	246
Economics (except agricultural) .....	1,828	1,605	1,474	1,077	1,118	1,037	1,055	889	889
Geography .....	27	27	26	21	31	27	20	18	29
History and philosophy of science .....	4	4	18	7	8	3	5	3	5
Linguistics .....	189	324	222	208	244	172	212	171	215
Political science .....	6,359	4,681	5,052	4,765	5,549	5,114	4,974	4,237	4,335
Sociology .....	584	554	487	454	449	392	382	374	373
Sociology/anthropology .....	331	280	283	243	229	183	151	167	171
Social sciences, n.e.c. ....	922	1,174	1,253	1,420	1,151	1,328	1,167	1,196	1,194
Total, health fields .....	7,215	7,817	7,816	7,959	7,269	7,508	7,219	7,432	8,979
Dentistry .....	34	39	42	29	43	43	54	38	33
Neurology .....	0	1	0	7	17	7	8	10	16
Nursing .....	3,239	3,614	3,578	3,446	3,039	2,870	2,731	2,737	4,151
Pharmaceutical sciences .....	607	472	430	492	435	345	402	407	445
Preventive medicine/community health .....	1,338	1,501	1,641	1,569	1,517	1,546	1,487	1,373	1,372
Speech pathology/audiology .....	428	439	528	464	506	513	535	625	630
Veterinary sciences .....	0	3	3	3	3	0	0	8	8
Clinical medicine, n.e.c. ....	169	157	138	145	144	151	102	90	142
Health related, n.e.c. ....	1,400	1,591	1,458	1,804	1,565	2,033	1,900	2,144	2,182

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table B-45. Part-time science and engineering graduate students in all institutions, by field and citizenship, and racial/ethnic background of U.S. citizens: 1983-91**

Page 1 of 3

Field, citizenship, and racial/ethnic background	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
<b>Total, all surveyed fields</b>	<b>139,530</b>	<b>141,714</b>	<b>147,191</b>	<b>149,367</b>	<b>149,669</b>	<b>149,527</b>	<b>151,012</b>	<b>155,365</b>	<b>167,022</b>
Total U.S. citizens	128,129	130,065	135,518	137,186	136,331	135,740	135,785	139,597	149,267
Black, non-Hispanic	6,254	6,094	6,049	8,011	5,947	6,386	6,371	6,933	7,593
American Indian/Alaskan Native	410	348	316	316	334	424	400	489	590
Asian/Pacific Islander	4,108	4,211	5,173	5,273	5,901	6,226	6,360	7,039	7,617
Hispanic	4,393	4,157	4,027	3,955	4,230	4,387	4,292	4,478	5,080
White, non-Hispanic	100,520	100,741	104,378	106,038	106,803	108,088	107,625	111,364	117,965
Other or unknown	12,444	14,514	15,575	15,593	13,116	10,229	10,737	9,294	10,422
Non-U.S. citizens	11,401	11,649	11,673	12,181	13,338	13,787	15,227	15,768	17,755
<b>Sciences, total</b>	<b>81,197</b>	<b>81,542</b>	<b>84,268</b>	<b>83,489</b>	<b>83,850</b>	<b>85,069</b>	<b>86,840</b>	<b>90,144</b>	<b>94,165</b>
Total U.S. citizens	75,170	75,160	77,973	76,974	76,510	77,612	78,670	81,767	84,679
Black, non-Hispanic	4,383	4,162	4,208	4,165	4,106	4,444	4,515	4,882	5,090
American Indian/Alaskan Native	250	198	207	200	208	285	252	311	400
Asian/Pacific Islander	2,007	2,103	2,499	2,514	2,836	3,058	3,176	3,390	3,585
Hispanic	3,135	2,874	2,731	2,626	2,732	2,802	2,818	2,963	3,179
White, non-Hispanic	58,630	57,561	59,848	59,333	60,008	62,113	62,410	65,446	66,869
Other or unknown	6,765	8,262	8,400	8,136	8,620	4,910	5,499	4,775	5,556
Non-U.S. citizens	6,027	6,382	6,295	6,515	7,340	7,457	8,170	8,377	9,486
<b>Physical sciences</b>	<b>4,251</b>	<b>4,204</b>	<b>4,312</b>	<b>4,484</b>	<b>4,316</b>	<b>4,368</b>	<b>4,412</b>	<b>4,579</b>	<b>4,769</b>
Total U.S. citizens	3,822	3,759	3,854	3,954	3,716	3,760	3,739	3,768	3,892
Black, non-Hispanic	163	159	156	133	130	127	150	163	176
American Indian/Alaskan Native	5	12	7	13	10	9	5	7	6
Asian/Pacific Islander	159	144	147	146	151	174	152	181	211
Hispanic	114	73	69	80	77	75	99	112	92
White, non-Hispanic	3,175	3,158	3,105	3,185	2,992	3,147	3,090	3,056	3,124
Other or unknown	206	213	370	397	356	228	243	249	283
Non-U.S. citizens	429	445	458	530	600	628	673	811	877
<b>Earth, atmospheric, &amp; ocean sciences</b>	<b>3,522</b>	<b>3,818</b>	<b>4,133</b>	<b>3,863</b>	<b>3,979</b>	<b>3,741</b>	<b>3,706</b>	<b>3,832</b>	<b>4,333</b>
Total U.S. citizens	3,343	3,608	3,930	3,658	3,724	3,478	3,430	3,583	3,982
Black, non-Hispanic	30	26	38	33	27	35	29	37	47
American Indian/Alaskan Native	4	5	4	4	4	6	6	5	11
Asian/Pacific Islander	84	44	39	29	38	41	46	70	68
Hispanic	81	77	57	60	45	44	41	55	55
White, non-Hispanic	3,022	3,238	3,403	3,218	3,336	3,168	3,129	3,322	3,695
Other or unknown	122	225	389	314	274	184	179	94	116
Non-U.S. citizens	179	210	203	205	255	263	276	249	341
<b>Mathematical sciences</b>	<b>6,423</b>	<b>6,148</b>	<b>5,762</b>	<b>5,577</b>	<b>5,480</b>	<b>5,589</b>	<b>5,643</b>	<b>5,946</b>	<b>5,733</b>
Total U.S. citizens	5,711	5,493	5,235	4,912	4,845	4,938	4,943	5,288	4,991
Black, non-Hispanic	239	206	211	205	184	205	209	248	245
American Indian/Alaskan Native	20	18	16	22	27	16	14	7	8
Asian/Pacific Islander	227	261	211	239	266	286	275	328	308
Hispanic	125	116	97	105	74	109	84	107	124
White, non-Hispanic	4,701	4,392	4,148	3,659	3,720	3,656	3,909	4,129	3,727
Other or unknown	399	500	552	682	574	466	502	469	579
Non-U.S. citizens	712	655	527	665	635	651	700	660	742
<b>Computer sciences</b>	<b>12,929</b>	<b>14,223</b>	<b>15,743</b>	<b>16,087</b>	<b>16,565</b>	<b>17,161</b>	<b>16,801</b>	<b>17,514</b>	<b>18,176</b>
Total U.S. citizens	11,344	12,399	13,835	14,215	14,322	14,922	14,158	14,683	14,773
Black, non-Hispanic	357	357	405	397	453	499	493	597	634
American Indian/Alaskan Native	11	11	11	10	12	28	24	25	24
Asian/Pacific Islander	541	706	1,118	1,177	1,401	1,550	1,633	1,677	1,679
Hispanic	177	177	351	284	383	355	347	380	436
White, non-Hispanic	8,429	8,638	9,563	9,828	10,514	11,222	10,211	10,783	10,613
Other or unknown	1,829	2,510	2,387	2,519	1,559	1,268	1,450	1,221	1,387
Non-U.S. citizens	1,585	1,824	1,908	1,872	2,243	2,239	2,643	2,831	3,403
<b>Agricultural sciences</b>	<b>2,470</b>	<b>2,330</b>	<b>2,308</b>	<b>2,119</b>	<b>2,032</b>	<b>2,022</b>	<b>2,125</b>	<b>2,225</b>	<b>2,237</b>
Total U.S. citizens	2,244	2,114	2,049	1,923	1,778	1,767	1,856	1,914	1,898
Black, non-Hispanic	21	31	36	33	34	25	28	24	32
American Indian/Alaskan Native	12	7	7	7	13	12	6	3	4
Asian/Pacific Islander	21	14	27	16	14	26	25	30	27
Hispanic	42	51	54	50	38	43	43	32	43
White, non-Hispanic	1,989	1,871	1,760	1,691	1,583	1,612	1,691	1,776	1,747
Other or unknown	159	140	165	128	96	49	63	49	45
Non-U.S. citizens	226	216	259	196	254	255	269	311	339

See explanatory information, if any, and SOURCE(S) at end of table.



**Table B-45. Part-time science and engineering graduate students in all institutions, by field and citizenship, and racial/ethnic background of U.S. citizens: 1983-91**

Page 2 of 3

Field, citizenship, and racial/ethnic background	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
<b>Biological sciences</b>	<b>8,909</b>	<b>8,858</b>	<b>9,135</b>	<b>8,995</b>	<b>8,609</b>	<b>8,467</b>	<b>8,577</b>	<b>9,063</b>	<b>9,191</b>
Total U.S. citizens	8,360	8,091	8,554	8,343	7,907	7,736	7,783	8,207	8,283
Black, non-Hispanic	325	348	373	331	293	338	328	305	324
American Indian/Alaskan Native	30	12	15	17	14	27	15	31	115
Asian/Pacific Islander	244	193	212	234	242	244	261	292	365
Hispanic	191	172	178	203	205	216	240	261	278
White, non-Hispanic	6,957	6,863	7,147	6,868	6,480	6,584	6,521	6,968	6,783
Other or unknown	613	503	629	692	673	327	418	350	418
Non-U.S. citizens	549	567	581	652	702	731	794	856	908
<b>Psychology</b>	<b>14,219</b>	<b>14,835</b>	<b>15,422</b>	<b>14,948</b>	<b>15,019</b>	<b>15,788</b>	<b>16,438</b>	<b>17,549</b>	<b>19,210</b>
Total U.S. citizens	13,879	14,493	15,086	14,614	14,696	15,457	16,130	17,204	18,832
Black, non-Hispanic	744	798	734	702	723	777	842	965	1,045
American Indian/Alaskan Native	42	34	47	36	40	58	52	85	72
Asian/Pacific Islander	163	161	178	174	172	171	183	238	285
Hispanic	878	753	604	567	558	607	515	742	815
White, non-Hispanic	11,234	11,405	12,161	12,030	12,239	13,028	13,574	14,405	15,532
Other or unknown	1,018	1,342	1,362	1,105	964	816	964	769	1,083
Non-U.S. citizens	340	342	336	334	323	331	308	345	378
<b>Social sciences</b>	<b>28,474</b>	<b>27,326</b>	<b>27,453</b>	<b>27,416</b>	<b>27,850</b>	<b>27,913</b>	<b>29,138</b>	<b>29,434</b>	<b>30,516</b>
Total U.S. citizens	26,467	25,203	25,430	25,355	25,522	25,554	26,631	27,120	28,018
Black, non-Hispanic	2,504	2,237	2,255	2,331	2,262	2,438	2,436	2,543	2,587
American Indian/Alaskan Native	128	99	100	91	88	129	130	148	180
Asian/Pacific Islander	568	580	567	499	552	566	601	574	642
Hispanic	1,727	1,462	1,321	1,277	1,352	1,353	1,449	1,274	1,336
White, non-Hispanic	19,123	17,996	18,561	18,856	19,144	19,496	20,385	21,007	21,648
Other or unknown	2,419	2,829	2,626	2,301	2,124	1,572	1,630	1,574	1,645
Non-U.S. citizens	2,007	2,123	2,023	2,061	2,328	2,359	2,507	2,314	2,498
<b>Engineering, total</b>	<b>37,180</b>	<b>37,623</b>	<b>40,222</b>	<b>41,913</b>	<b>42,004</b>	<b>39,972</b>	<b>39,773</b>	<b>41,637</b>	<b>43,177</b>
Total U.S. citizens	32,453	32,935	35,465	36,885	36,616	34,220	33,356	34,966	35,738
Black, non-Hispanic	746	773	718	740	715	698	691	845	883
American Indian/Alaskan Native	83	82	54	54	58	66	59	88	81
Asian/Pacific Islander	1,695	1,705	2,252	2,357	2,662	2,688	2,709	3,129	3,309
Hispanic	692	789	743	788	882	784	705	816	1,008
White, non-Hispanic	24,357	24,420	25,967	27,007	27,713	26,357	25,506	26,445	26,830
Other or unknown	4,080	5,166	5,731	5,939	4,586	3,647	3,686	3,643	3,627
Non-U.S. citizens	4,727	4,688	4,757	5,028	5,388	5,752	6,417	6,671	7,439
<b>Chemical engineering</b>	<b>1,694</b>	<b>1,639</b>	<b>1,604</b>	<b>1,418</b>	<b>1,406</b>	<b>1,259</b>	<b>1,178</b>	<b>1,288</b>	<b>1,339</b>
Total U.S. citizens	1,418	1,410	1,392	1,228	1,242	1,115	998	1,121	1,155
Black, non-Hispanic	24	19	19	24	24	25	19	19	24
American Indian/Alaskan Native	2	2	2	3	0	2	5	4	0
Asian/Pacific Islander	76	74	77	57	69	60	64	78	102
Hispanic	29	44	33	30	25	25	18	32	49
White, non-Hispanic	1,224	1,164	1,047	1,040	1,033	947	861	952	947
Other or unknown	63	107	214	74	91	56	31	36	33
Non-U.S. citizens	276	229	212	190	164	144	180	167	184
<b>Civil engineering</b>	<b>5,114</b>	<b>5,114</b>	<b>5,156</b>	<b>5,005</b>	<b>5,067</b>	<b>4,865</b>	<b>4,945</b>	<b>5,380</b>	<b>6,051</b>
Total U.S. citizens	4,144	4,232	4,236	3,983	4,016	3,792	3,977	4,229	4,711
Black, non-Hispanic	81	92	82	79	88	88	93	115	125
American Indian/Alaskan Native	11	10	7	13	4	9	8	20	14
Asian/Pacific Islander	206	183	159	173	240	277	273	351	380
Hispanic	121	123	110	98	105	109	121	120	157
White, non-Hispanic	3,107	3,132	3,061	2,893	2,963	3,043	3,137	3,285	3,647
Other or unknown	618	692	817	727	616	266	345	338	388
Non-U.S. citizens	970	882	920	1,022	1,051	1,073	968	1,151	1,340
<b>Electrical engineering</b>	<b>11,913</b>	<b>12,341</b>	<b>13,274</b>	<b>13,577</b>	<b>14,174</b>	<b>14,184</b>	<b>14,659</b>	<b>15,016</b>	<b>15,284</b>
Total U.S. citizens	10,174	10,797	11,507	11,762	12,164	12,233	12,252	12,451	12,400
Black, non-Hispanic	165	194	228	154	181	218	239	290	290
American Indian/Alaskan Native	23	19	14	10	13	23	18	31	14
Asian/Pacific Islander	711	717	1,046	1,080	1,206	1,241	1,338	1,535	1,542
Hispanic	214	222	230	214	264	255	255	282	331
White, non-Hispanic	6,846	7,004	7,730	7,677	8,410	8,710	8,813	8,801	8,720
Other or unknown	2,215	2,641	2,259	2,627	2,090	1,786	1,589	1,512	1,503
Non-U.S. citizens	1,739	1,544	1,767	1,815	2,010	1,951	2,407	2,565	2,884

See explanatory information, if any, and SOURCE(S) at end of table.



**Table B-45. Part-time science and engineering graduate students in all institutions, by field and citizenship, and racial/ethnic background of U.S. citizens: 1983-91**

Page 3 of 3

Field, citizenship, and racial/ethnic background	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
<b>Industrial engineering</b>	6,051	6,102	7,324	8,013	8,224	7,333	8,697	8,748	7,620
Total U.S. citizens	5,602	5,709	6,945	7,581	7,601	6,701	5,998	6,004	6,639
Black, non-Hispanic	250	248	186	223	209	188	175	188	236
American Indian/Alaskan Native	14	12	6	8	21	11	9	17	31
Asian/Pacific Islander	138	152	212	232	275	276	259	286	354
Hispanic	166	231	171	180	192	174	128	125	154
White, non-Hispanic	4,878	4,568	5,792	6,075	6,419	5,688	4,935	4,784	5,151
Other or unknown	446	500	578	863	48	364	490	604	713
Non-U.S. citizens	359	393	379	432	623	632	701	744	989
<b>Mechanical engineering</b>	4,581	5,157	5,282	5,924	6,114	5,781	5,775	5,793	6,166
Total U.S. citizens	3,988	4,417	4,512	5,111	5,275	4,868	4,819	4,818	5,045
Black, non-Hispanic	59	78	77	65	85	78	80	94	98
American Indian/Alaskan Native	8	21	14	10	11	4	7	9	12
Asian/Pacific Islander	212	222	343	330	359	315	332	329	411
Hispanic	61	59	86	143	174	107	94	124	180
White, non-Hispanic	3,220	3,480	3,690	3,827	3,917	3,817	3,687	3,705	3,854
Other or unknown	426	557	302	738	729	547	619	555	490
Non-U.S. citizens	595	740	770	813	839	913	956	977	1,121
<b>Other engineering</b>	7,827	7,270	7,582	7,976	7,019	6,550	6,519	7,412	6,709
Total U.S. citizens	7,039	6,370	6,873	7,220	6,318	5,511	5,314	6,345	5,788
Black, non-Hispanic	167	142	126	195	128	101	85	139	110
American Indian/Alaskan Native	25	18	11	10	9	17	12	7	10
Asian/Pacific Islander	352	357	415	485	513	499	443	550	520
Hispanic	101	110	113	123	122	114	89	133	137
White, non-Hispanic	5,282	5,074	4,647	5,495	4,971	4,152	4,073	4,918	4,511
Other or unknown	1,112	689	1,561	912	575	628	612	598	500
Non-U.S. citizens	788	900	709	756	701	1,039	1,205	1,067	921
<b>Total, health fields</b>	21,153	22,549	22,701	23,965	23,815	24,486	24,399	23,584	29,680
Total U.S. citizens	20,506	21,970	22,080	23,327	23,205	23,908	23,759	22,864	28,850
Black, non-Hispanic	1,125	1,159	1,123	1,106	1,126	1,244	1,165	1,206	1,620
American Indian/Alaskan Native	77	88	55	62	88	73	89	90	109
Asian/Pacific Islander	408	403	422	402	403	500	475	520	723
Hispanic	566	494	553	541	616	801	769	699	893
White, non-Hispanic	17,533	18,760	18,563	19,698	19,082	19,618	19,709	19,473	24,268
Other or unknown	799	1,086	1,364	1,518	1,910	1,672	1,552	876	1,239
Non-U.S. citizens	647	579	621	638	610	578	640	720	830

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table B-46. Part-time science and engineering graduate students with U.S. citizenship in all institutions, by field: 1983-91**

Page 1 of 1

Field	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all surveyed fields	128,129	130,065	135,518	137,186	136,331	135,740	135,785	139,597	149,267
Total, science/engineering fields	107,823	108,095	113,438	113,859	113,126	111,832	112,026	116,733	120,417
Engineering, total	32,453	32,935	35,465	36,085	36,616	34,220	33,358	34,968	35,738
Aerospace	418	432	471	589	585	611	609	772	629
Agricultural	154	141	140	127	107	118	124	101	110
Biomedical	186	198	211	225	239	234	246	250	244
Chemical	1,418	1,410	1,392	1,228	1,242	1,115	998	1,121	1,155
Civil	4,144	4,232	4,236	3,983	4,016	3,792	3,977	4,229	4,711
Electrical	10,174	10,797	11,507	11,762	12,164	12,233	12,252	12,451	12,400
Engineering science	820	829	769	872	885	666	687	647	673
Industrial	5,692	5,709	6,945	7,581	7,601	6,701	5,996	6,004	6,639
Mechanical	3,986	4,417	4,512	5,111	5,275	4,868	4,819	4,816	5,045
Metallurgical/materials	673	698	769	746	844	752	763	840	912
Mining	73	72	87	56	59	61	65	60	100
Nuclear	128	178	168	189	205	170	180	165	172
Petroleum	76	121	178	148	152	125	134	148	148
Engineering, n.e.c.	4,511	3,703	4,080	4,268	3,242	2,574	2,506	3,362	2,800
Sciences, total	75,170	75,160	77,973	76,974	76,510	77,612	78,670	81,767	84,679
Physical sciences	3,822	3,759	3,854	3,954	3,716	3,760	3,739	3,768	3,892
Astronomy	30	38	32	32	31	20	21	15	14
Chemistry	2,484	2,355	2,448	2,417	2,232	2,154	2,173	2,181	2,194
Physics	1,179	1,204	1,206	1,292	1,282	1,393	1,334	1,370	1,422
Physical sciences, n.e.c.	129	162	168	213	171	193	211	202	262
Earth, atmospheric, & ocean sciences	3,343	3,608	3,930	3,658	3,724	3,478	3,430	3,583	3,992
Atmospheric sciences	102	112	79	99	108	95	68	84	88
Geosciences	2,030	2,172	2,510	2,330	2,220	2,034	1,948	1,789	1,805
Oceanography	426	471	486	400	428	376	367	372	350
Earth, atmos., & ocean sci., n.e.c.	785	853	855	829	968	973	1,027	1,338	1,749
Mathematical sciences	5,711	5,493	5,235	4,912	4,845	4,938	4,943	5,268	4,991
Computer sciences	11,344	12,399	13,835	14,215	14,322	14,922	14,158	14,683	14,773
Agricultural sciences	2,244	2,114	2,049	1,923	1,778	1,767	1,856	1,914	1,898
Biological sciences	8,360	8,091	8,554	8,343	7,907	7,736	7,783	8,207	8,283
Anatomy	109	89	101	76	84	81	73	78	80
Biochemistry	192	207	188	200	178	163	210	167	191
Biology	3,887	3,731	3,986	3,892	3,599	3,460	3,368	3,591	3,635
Biometry/epidemiology	259	236	338	345	386	446	487	603	556
Biophysics	12	12	57	79	98	45	45	27	14
Botany	339	346	415	330	341	316	317	296	302
Cell biology	42	45	20	54	72	47	47	58	71
Ecology	147	194	137	146	161	179	217	273	274
Entomology/parasitology	154	158	181	177	154	145	138	134	128
Genetics	64	67	57	78	95	92	104	98	89
Microbiology	507	444	500	459	401	408	435	424	449
Nutrition	1,251	1,148	1,178	1,159	1,146	1,219	1,245	1,213	1,149
Pathology	361	361	298	301	279	256	250	259	324
Pharmacology	130	121	109	110	133	122	113	125	113
Physiology	219	186	218	207	207	202	136	138	149
Zoology	362	401	398	338	297	283	282	376	364
Biosciences, n.e.c.	325	345	375	383	278	272	316	349	395
Psychology	13,879	14,493	15,086	14,614	14,696	15,457	16,130	17,204	18,832
Social sciences	26,467	25,203	25,430	25,355	25,522	25,554	26,631	27,120	28,018
Agricultural economics	189	199	205	224	239	236	246	191	232
Anthropology	1,825	1,545	1,619	1,648	1,550	1,590	1,609	1,584	1,555
Economics (except agricultural)	3,250	3,018	2,865	2,574	2,399	2,391	2,352	2,321	2,335
Geography	803	786	769	884	864	928	1,090	1,098	1,120
History and philosophy of science	23	31	41	26	25	21	38	29	42
Linguistics	558	700	589	619	682	577	710	765	652
Political science	14,012	12,528	13,262	13,143	13,767	13,828	14,466	14,439	15,022
Sociology	1,895	1,795	1,713	1,692	1,716	1,733	1,825	1,818	2,184
Sociology/anthropology	510	434	436	412	386	392	360	375	305
Social sciences, n.e.c.	3,602	4,167	3,931	4,133	3,894	3,858	3,935	4,500	4,571
Total, health fields	20,506	21,970	22,080	23,327	23,205	23,908	23,759	22,864	28,850
Dentistry	67	79	83	110	134	143	134	108	123
Neurology	3	3	2	10	19	10	18	19	25
Nursing	10,822	11,770	11,348	11,784	11,434	11,528	11,199	10,177	15,849
Pharmaceutical sciences	724	641	670	704	644	598	694	661	728
Preventive medicine/community health	2,614	2,782	2,970	2,965	3,186	3,285	3,296	3,509	3,866
Speech pathology/audiology	2,506	2,415	2,461	2,496	2,357	2,372	2,384	2,630	2,615
Veterinary sciences	89	113	115	109	125	134	122	171	162
Clinical medicine, n.e.c.	521	499	541	501	536	545	384	351	354
Health related, n.e.c.	3,360	3,668	3,890	4,648	4,770	5,293	5,528	5,238	5,288

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1997. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table B-47. Part-time science and engineering graduate students without U.S. citizenship in all institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all surveyed fields	11,401	11,649	11,673	12,181	13,338	13,787	15,227	15,768	17,755
Total, science/engineering fields	10,754	11,070	11,052	11,543	12,728	13,209	14,587	15,048	16,925
Engineering, total	4,727	4,688	4,757	5,028	5,388	5,752	6,417	6,671	7,439
Aerospace	47	54	73	61	58	79	73	84	98
Agricultural	49	40	34	46	32	42	56	45	48
Biomedical	27	26	33	30	58	66	62	81	68
Chemical	276	229	212	190	184	144	180	167	184
Civil	970	882	920	1,022	1,051	1,073	968	1,151	1,340
Electrical	1,739	1,544	1,767	1,815	2,010	1,951	2,407	2,565	2,884
Engineering sciences	85	52	65	45	85	102	131	121	117
Industrial	359	393	379	432	623	632	701	744	989
Mechanical	595	740	770	813	839	913	956	977	1,121
Metallurgical/materials	70	89	81	92	86	119	111	159	178
Mining	23	6	11	14	19	13	15	43	53
Nuclear	23	38	22	17	30	28	31	33	30
Petroleum	41	9	27	27	22	18	25	38	42
Engineering, n.e.c.	423	586	383	424	311	572	701	463	287
Sciences, total	6,027	6,382	6,295	6,515	7,340	7,457	8,170	8,377	9,486
Physical sciences	429	445	458	530	600	628	673	811	877
Astronomy	3	5	4	3	10	6	6	5	5
Chemistry	289	274	272	323	352	330	367	482	532
Physics	132	163	179	190	221	277	283	302	317
Physical sciences, n.e.c.	5	3	3	14	17	15	17	22	23
Earth, atmospheric, & ocean sciences	179	210	203	205	255	263	276	249	341
Atmospheric sciences	9	19	13	7	20	16	14	17	21
Geosciences	88	105	81	105	112	121	125	120	132
Oceanography	25	32	33	34	48	28	41	25	45
Earth, atmos., & ocean sci., n.e.c.	57	54	76	59	75	96	96	87	143
Mathematical sciences	712	655	527	665	635	651	700	660	742
Computer sciences	1,585	1,824	1,908	1,872	2,243	2,239	2,643	2,831	3,403
Agricultural sciences	226	216	259	196	254	255	269	311	339
Biological sciences	549	567	581	652	702	731	794	856	908
Anatomy	7	4	1	4	3	2	6	11	10
Biochemistry	35	20	17	45	33	27	62	47	58
Biology	163	194	205	217	220	232	234	264	257
Biometry/epidemiology	20	17	26	41	34	53	54	67	64
Biophysics	1	2	3	19	25	3	0	0	4
Botany	46	42	56	47	68	64	71	57	83
Cell biology	2	2	3	7	6	8	10	12	22
Ecology	16	17	15	9	6	13	13	14	16
Entomology/parasitology	16	16	23	22	28	34	34	42	29
Genetics	7	6	6	13	11	10	7	10	19
Microbiology	51	56	68	44	37	57	63	76	79
Nutrition	112	111	96	107	128	133	140	137	143
Pathology	32	23	21	27	26	18	17	19	27
Pharmacology	6	3	5	12	17	18	19	18	15
Physiology	9	5	7	8	10	10	13	22	20
Zoology	18	39	19	25	29	32	33	44	44
Biosciences, n.e.c.	10	10	10	5	21	17	18	16	18
Psychology	340	342	336	334	323	331	308	345	378
Social sciences	2,007	2,123	2,023	2,061	2,328	2,359	2,507	2,314	2,498
Agricultural economics	59	53	73	60	107	114	118	121	131
Anthropology	79	77	96	96	74	79	108	94	104
Economics (except agricultural)	671	718	627	570	636	624	703	649	644
Geography	55	74	43	63	69	65	63	65	91
History and philosophy of science	1	0	4	3	2	1	1	0	1
Linguistics	89	141	129	132	151	147	165	168	203
Political science	595	595	579	698	834	779	824	693	781
Sociology	231	200	210	190	203	230	264	253	284
Sociology/anthropology	19	35	33	25	36	33	29	40	36
Social sciences, n.e.c.	208	230	229	224	216	287	232	231	223
Total, health fields	647	579	621	638	610	578	640	720	630
Dentistry	8	3	7	3	14	12	14	21	18
Neurology	0	1	0	0	0	0	3	3	3
Nursing	119	104	122	94	102	92	104	95	148
Pharmaceutical sciences	149	107	94	137	139	108	106	133	152
Preventive medicine/community health	104	104	184	182	167	169	178	229	229
Speech pathology/audiology	75	65	79	70	51	49	64	67	58
Veterinary sciences	14	19	7	15	14	12	11	20	15
Clinical medicine, n.e.c.	32	27	23	42	34	28	26	28	58
Health related, n.e.c.	146	149	105	95	89	108	134	124	149

1/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table B-48. Science and engineering graduate students in historically black colleges and universities, by field: 1983-91

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields .....	3,446	3,875	3,587	3,432	3,202	3,474	3,429	3,564	3,855
Total, science & engineering fields .....	3,269	3,693	3,404	3,268	3,042	3,319	3,228	3,398	3,530
Engineering, total .....	311	405	342	374	335	380	383	394	412
Aerospace .....	0	0	0	0	0	0	0	0	0
Agricultural .....	0	0	0	0	0	0	0	0	0
Biomedical .....	0	0	0	0	0	0	0	0	0
Chemical .....	0	0	0	0	0	0	0	0	16
Civil .....	47	65	46	47	52	57	72	60	75
Electrical .....	94	131	121	61	129	111	129	132	132
Engineering science .....	0	0	0	0	0	0	0	0	0
Industrial .....	23	37	20	0	10	26	26	28	34
Mechanical .....	47	93	81	63	65	102	72	100	94
Metallurgical/materials .....	0	0	0	0	0	0	0	0	0
Mining .....	0	0	0	0	0	0	0	0	0
Nuclear .....	0	0	0	0	0	0	0	0	0
Petroleum .....	0	0	0	0	0	0	0	0	0
Engineering, n.e.c. ....	100	79	74	203	79	84	84	74	61
Sciences, total .....	2,958	3,288	3,062	2,894	2,707	2,939	2,845	3,004	3,118
Physical sciences .....	319	347	320	299	300	328	336	322	353
Astronomy .....	0	0	0	0	0	0	0	0	0
Chemistry .....	250	269	228	196	197	204	233	203	206
Physics .....	57	65	72	84	100	112	94	112	141
Physical sciences, n.e.c. ....	12	13	20	19	3	12	9	7	6
Earth, atmospheric, & ocean sciences .....	32	39	34	19	16	38	27	48	62
Atmospheric sciences .....	0	0	0	0	0	0	0	0	0
Geosciences .....	16	23	17	19	16	13	2	6	5
Oceanography .....	0	0	0	0	0	23	25	37	41
Earth, atmos., & ocean sci., n.e.c. ....	16	16	17	0	0	0	0	5	16
Mathematical sciences .....	235	266	240	265	259	252	255	179	187
Computer sciences .....	271	320	304	279	229	277	290	404	429
Agricultural sciences .....	82	109	66	55	52	64	66	131	122
Biological sciences .....	593	536	479	425	409	414	447	419	469
Anatomy .....	8	6	11	9	6	11	9	8	6
Biochemistry .....	18	19	11	14	12	15	15	15	15
Biology .....	323	301	267	207	207	160	206	143	203
Biometry/epidemiology .....	0	0	0	0	0	0	0	0	0
Biophysics .....	0	0	0	0	0	0	0	0	0
Botany .....	44	17	16	37	32	38	43	68	62
Cell biology .....	0	0	0	0	0	0	0	0	0
Ecology .....	0	0	0	0	0	0	0	0	0
Entomology/parasitology .....	0	0	0	0	0	0	0	0	0
Genetics .....	27	29	30	32	25	26	26	22	24
Microbiology .....	26	24	21	14	10	7	8	15	15
Nutrition .....	20	36	34	34	35	43	44	42	37
Pathology .....	0	0	0	0	0	0	0	0	0
Pharmacology .....	36	25	15	17	12	10	8	8	14
Physiology .....	19	22	27	20	22	22	24	32	35
Zoology .....	40	29	25	22	23	23	22	28	28
Biosciences, n.e.c. ....	32	28	22	19	25	39	42	38	30
Psychology .....	384	436	404	419	374	443	440	448	467
Social sciences .....	1,042	1,235	1,215	1,133	1,068	1,125	984	1,053	1,029
Agricultural economics .....	53	62	63	59	46	48	49	39	43
Anthropology .....	0	0	0	0	0	0	0	0	0
Economics (except agricultural) .....	106	135	161	147	123	132	99	86	59
Geography .....	0	0	0	0	0	0	0	0	0
History and philosophy of science .....	0	0	0	0	0	0	0	0	0
Linguistics .....	43	137	129	129	144	136	137	134	142
Political science .....	297	392	345	389	367	399	278	325	320
Sociology .....	214	173	226	179	195	185	160	211	219
Sociology/anthropology .....	113	113	80	60	62	58	58	61	65
Social sciences, n.e.c. ....	216	223	211	170	131	167	183	197	181
Total, health fields .....	177	182	183	164	160	155	201	166	325
Dentistry .....	0	0	0	0	0	0	0	0	0
Neurology .....	0	0	0	0	0	0	0	0	0
Nursing .....	68	59	46	38	50	45	41	0	61
Pharmaceutical sciences .....	13	13	16	15	14	22	42	41	93
Preventive medicine/community health .....	11	0	0	0	0	0	0	0	0
Speech pathology/audiology .....	59	81	84	83	67	62	42	45	61
Veterinary sciences .....	26	26	27	23	20	17	19	19	19
Clinical medicine, n.e.c. ....	0	3	0	0	0	0	57	61	91
Health related, n.e.c. ....	0	0	10	5	9	9	0	0	0

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table B-49. Male science and engineering graduate students in historically black colleges and universities, by field: 1983-91

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields .....	1,981	2,322	2,145	2,045	1,958	2,092	1,976	2,008	2,067
Total, science & engineering fields .....	1,949	2,288	2,107	2,010	1,928	2,042	1,900	1,935	1,975
Engineering, total .....	274	364	306	315	282	319	324	307	327
Aerospace .....	0	0	0	0	0	0	0	0	0
Agricultural .....	0	0	0	0	0	0	0	0	0
Biomedical .....	0	0	0	0	0	0	0	0	0
Chemical .....	0	0	0	0	0	0	0	0	10
Civil .....	33	54	37	27	30	30	55	48	82
Electrical .....	87	121	110	50	112	99	113	93	104
Engineering science .....	0	0	0	0	0	0	0	0	0
Industrial .....	18	32	13	0	8	21	17	13	20
Mechanical .....	45	66	74	60	59	93	66	89	80
Metallurgical/materials .....	0	0	0	0	0	0	0	0	0
Mining .....	0	0	0	0	0	0	0	0	0
Nuclear .....	0	0	0	0	0	0	0	0	0
Petroleum .....	0	0	0	0	0	0	0	0	0
Engineering, n.e.c. ....	91	71	72	178	73	76	73	64	51
Sciences, total .....	1,675	1,924	1,801	1,695	1,646	1,723	1,576	1,628	1,648
Physical sciences .....	197	235	207	214	216	235	231	212	239
Astronomy .....	0	0	0	0	0	0	0	0	0
Chemistry .....	145	171	135	136	128	135	149	122	125
Physics .....	47	58	64	71	86	94	80	88	113
Physical sciences, n.e.c. ....	5	6	8	7	2	6	2	2	1
Earth, atmospheric, & ocean sciences .....	16	20	27	10	11	19	15	26	37
Atmospheric sciences .....	0	0	0	0	0	0	0	0	0
Geosciences .....	6	9	12	10	11	9	2	4	3
Oceanography .....	0	0	0	0	0	10	13	20	23
Earth, atmos., & ocean sci., n.e.c. ....	10	11	15	0	0	0	0	2	11
Mathematical sciences .....	139	162	140	160	178	168	163	109	117
Computer sciences .....	185	221	220	196	171	181	183	250	279
Agricultural sciences .....	86	102	51	46	44	56	57	104	91
Biological sciences .....	321	274	222	218	209	213	207	209	232
Anatomy .....	5	4	4	3	2	5	3	2	1
Biochemistry .....	11	12	6	9	10	14	13	12	10
Biology .....	173	151	114	85	92	89	93	70	88
Biometry/epidemiology .....	0	0	0	0	0	0	0	0	0
Biophysics .....	0	0	0	0	0	0	0	0	0
Botany .....	9	11	7	26	20	20	22	39	35
Cell biology .....	0	0	0	0	0	0	0	0	0
Ecology .....	0	0	0	0	0	0	0	0	0
Entomology/parasitology .....	0	0	0	0	0	0	0	0	0
Genetics .....	12	11	13	14	9	11	8	9	11
Microbiology .....	8	8	9	6	4	3	4	8	7
Nutrition .....	16	29	25	25	24	17	24	26	28
Pathology .....	0	0	0	0	0	0	0	0	0
Pharmacology .....	21	13	4	8	4	4	2	4	7
Physiology .....	14	13	16	15	17	14	15	19	23
Zoology .....	30	14	14	16	17	17	10	8	7
Biosciences, n.e.c. ....	22	8	10	11	10	19	13	12	15
Psychology .....	177	194	177	167	149	159	146	157	135
Social sciences .....	572	716	757	684	668	692	574	561	518
Agricultural economics .....	44	53	55	55	41	42	42	31	27
Anthropology .....	0	0	0	0	0	0	0	0	0
Economics (except agricultural) .....	76	101	131	114	95	106	74	85	41
Geography .....	0	0	0	0	0	0	0	0	0
History and philosophy of science .....	0	0	0	0	0	0	0	0	0
Linguistics .....	10	50	43	43	75	70	54	53	56
Political science .....	162	252	227	250	250	264	187	188	166
Sociology .....	105	63	117	77	92	92	85	94	101
Sociology/anthropology .....	41	53	43	27	28	26	19	20	39
Social sciences, n.e.c. ....	134	144	141	118	87	92	113	112	88
Total, health fields .....	32	34	38	35	30	50	76	73	92
Dentistry .....	0	0	0	0	0	0	0	0	0
Neurology .....	0	0	0	0	0	0	0	0	0
Nursing .....	1	1	0	1	0	0	1	0	5
Pharmaceutical sciences .....	9	9	11	10	9	14	25	23	42
Preventive medicine/community health .....	7	0	0	0	0	0	0	0	0
Speech pathology/audiology .....	3	3	2	2	0	19	0	5	1
Veterinary sciences .....	12	20	22	20	17	13	15	14	14
Clinical medicine, n.e.c. ....	0	1	0	0	0	0	35	31	30
Health related, n.e.c. ....	0	0	3	2	4	4	0	0	0

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



Table B-50. Female science and engineering graduate students in historically black colleges and universities, by field: 1983-91

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields .....	1,465	1,553	1,442	1,387	1,244	1,382	1,453	1,558	1,788
Total, science & engineering fields .....	1,320	1,405	1,297	1,258	1,114	1,277	1,328	1,463	1,555
Engineering, total .....	37	41	36	59	53	61	59	87	85
Aerospace .....	0	0	0	0	0	0	0	0	0
Agricultural .....	0	0	0	0	0	0	0	0	0
Biomedical .....	0	0	0	0	0	0	0	0	0
Chemical .....	0	0	0	0	0	0	0	0	6
Civil .....	14	11	9	20	22	27	17	12	13
Electrical .....	7	10	11	11	17	12	16	39	28
Engineering science .....	0	0	0	0	0	0	0	0	0
Industrial .....	5	5	7	0	2	5	9	15	14
Mechanical .....	2	7	7	3	6	9	6	11	14
Metallurgical/materials .....	0	0	0	0	0	0	0	0	0
Mining .....	0	0	0	0	0	0	0	0	0
Nuclear .....	0	0	0	0	0	0	0	0	0
Petroleum .....	0	0	0	0	0	0	0	0	0
Engineering, n.e.c. ....	9	8	2	25	6	8	11	10	10
Sciences, total .....	1,283	1,384	1,281	1,199	1,061	1,216	1,269	1,376	1,470
Physical sciences .....	122	112	113	85	84	93	105	110	114
Astronomy .....	0	0	0	0	0	0	0	0	0
Chemistry .....	105	98	93	60	69	69	84	81	81
Physics .....	10	7	8	13	14	18	14	24	28
Physical sciences, n.e.c. ....	7	7	12	12	1	6	7	5	5
Earth, atmospheric, & ocean sciences .....	18	19	7	9	5	17	12	22	25
Atmospheric sciences .....	0	0	0	0	0	0	0	0	0
Geosciences .....	10	14	5	9	5	4	0	2	2
Oceanography .....	0	0	0	0	0	13	12	17	18
Earth, atmos., & ocean sci., n.e.c. ....	6	5	2	0	0	0	0	3	5
Mathematical sciences .....	96	104	100	105	81	84	92	70	70
Computer sciences .....	86	99	84	83	58	96	107	154	150
Agricultural sciences .....	14	7	15	9	8	8	9	27	31
Biological sciences .....	272	262	257	207	200	201	240	210	237
Anatomy .....	3	2	7	6	4	6	6	6	5
Biochemistry .....	7	7	5	5	2	1	2	3	5
Biology .....	150	150	153	122	115	91	113	73	115
Biometry/epidemiology .....	0	0	0	0	0	0	0	0	0
Biophysics .....	0	0	0	0	0	0	0	0	0
Botany .....	35	6	9	11	12	18	21	29	27
Cell biology .....	0	0	0	0	0	0	0	0	0
Ecology .....	0	0	0	0	0	0	0	0	0
Entomology/parasitology .....	0	0	0	0	0	0	0	0	0
Genetics .....	15	18	17	18	16	15	18	13	13
Microbiology .....	18	16	12	8	6	4	4	7	8
Nutrition .....	4	7	9	9	11	26	20	16	9
Pathology .....	0	0	0	0	0	0	0	0	0
Pharmacology .....	15	12	11	9	8	6	6	4	7
Physiology .....	5	9	11	5	5	8	9	13	12
Zoology .....	10	15	11	6	6	6	12	20	21
Biosciences, n.e.c. ....	10	20	12	8	15	20	29	26	15
Psychology .....	207	242	227	252	225	284	294	291	332
Social sciences .....	470	519	458	449	400	433	410	492	511
Agricultural economics .....	9	9	8	4	5	6	7	8	16
Anthropology .....	0	0	0	0	0	0	0	0	0
Economics (except agricultural) .....	30	34	30	33	28	26	25	21	18
Geography .....	0	0	0	0	0	0	0	0	0
History and philosophy of science .....	0	0	0	0	0	0	0	0	0
Linguistics .....	33	87	86	86	69	66	83	81	86
Political science .....	135	140	118	139	117	135	91	139	154
Sociology .....	109	110	109	102	103	93	95	117	118
Sociology/anthropology .....	72	60	37	33	34	32	39	41	26
Social sciences, n.e.c. ....	82	79	70	52	44	75	70	85	93
Total, health fields .....	145	148	145	129	130	105	125	93	233
Dentistry .....	0	0	0	0	0	0	0	0	0
Neurology .....	0	0	0	0	0	0	0	0	0
Nursing .....	67	58	46	37	50	45	40	0	56
Pharmaceutical sciences .....	4	4	5	5	5	8	17	18	51
Preventive medicine/community health .....	4	0	0	0	0	0	0	0	0
Speech pathology/audiology .....	56	78	82	81	67	43	42	40	60
Veterinary sciences .....	14	6	5	3	3	4	4	5	5
Clinical medicine, n.e.c. ....	0	2	0	0	0	0	22	30	61
Health related, n.e.c. ....	0	0	7	3	5	5	0	0	0

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table B-51. Full-time science and engineering graduate students  
in historically black colleges and  
universities, by field: 1983-91**

Page 1 of 1

Field	1983	1994	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields .....	2,231	2,357	2,335	2,142	2,091	2,285	2,108	2,077	2,339
Total, science/engineering fields .....	2,107	2,240	2,200	2,020	1,974	2,173	1,958	1,951	2,150
Engineering, total .....	195	258	273	197	248	296	290	236	305
Aerospace .....	0	0	0	0	0	0	0	0	0
Agricultural .....	0	0	0	0	0	0	0	0	0
Biomedical .....	0	0	0	0	0	0	0	0	0
Chemical .....	0	0	0	0	0	0	0	0	15
Civil .....	34	38	42	32	35	40	57	28	32
Electrical .....	84	102	111	45	104	104	104	81	125
Engineering science .....	0	0	0	0	0	0	0	0	0
Industrial .....	10	22	18	0	10	20	19	20	24
Mechanical .....	34	63	71	60	60	92	64	72	81
Metallurgical/materials .....	0	0	0	0	0	0	0	0	0
Mining .....	0	0	0	0	0	0	0	0	0
Nuclear .....	0	0	0	0	0	0	0	0	0
Petroleum .....	0	0	0	0	0	0	0	0	0
Engineering, n.e.c. ....	33	33	31	60	39	40	46	35	28
Sciences, total .....	1,912	1,982	1,927	1,823	1,726	1,877	1,668	1,715	1,845
Physical sciences .....	271	258	262	239	244	272	232	215	256
Astronomy .....	0	0	0	0	0	0	0	0	0
Chemistry .....	222	205	194	169	165	180	156	135	147
Physics .....	49	52	65	64	77	88	74	76	107
Physical sciences, n.e.c. ....	0	1	3	6	2	4	2	4	2
Earth, atmospheric, & ocean sciences .....	27	25	25	7	9	18	17	24	31
Atmospheric sciences .....	0	0	0	0	0	0	0	0	0
Geosciences .....	11	9	8	7	9	6	2	2	0
Oceanography .....	0	0	0	0	0	12	15	20	25
Earth, atmos., & ocean sci., n.e.c. ....	16	16	17	0	0	0	0	2	6
Mathematical sciences .....	137	139	141	143	168	169	160	95	104
Computer sciences .....	185	202	212	206	163	209	169	216	253
Agricultural sciences .....	39	79	27	26	36	41	45	106	99
Biological sciences .....	511	422	369	339	325	299	339	331	362
Anatomy .....	8	6	11	9	6	11	9	8	6
Biochemistry .....	18	19	11	14	12	15	15	15	15
Biology .....	260	218	172	140	139	102	129	107	137
Biometry/epidemiology .....	0	0	0	0	0	0	0	0	0
Biophysics .....	0	0	0	0	0	0	0	0	0
Botany .....	32	5	11	31	26	31	31	39	38
Cell biology .....	0	0	0	0	0	0	0	0	0
Ecology .....	0	0	0	0	0	0	0	0	0
Entomology/parasitology .....	0	0	0	0	0	0	0	0	0
Genetics .....	25	27	27	29	25	22	22	18	22
Microbiology .....	26	24	20	14	10	7	8	15	15
Nutrition .....	20	36	34	32	34	30	34	33	33
Pathology .....	0	0	0	0	0	0	0	0	0
Pharmacology .....	34	24	15	16	12	9	8	8	14
Physiology .....	19	22	26	19	22	21	23	32	35
Zoology .....	38	18	23	17	18	18	22	20	21
Biosciences, n.e.c. ....	31	23	19	18	21	33	38	36	26
Psychology .....	132	173	159	183	163	202	197	175	219
Social sciences .....	610	684	732	680	618	667	509	553	521
Agricultural economics .....	50	49	41	46	31	29	27	25	26
Anthropology .....	0	0	0	0	0	0	0	0	0
Economics (except agricultural) .....	60	59	103	91	86	88	63	44	35
Geography .....	0	0	0	0	0	0	0	0	0
History and philosophy of science .....	0	0	0	0	0	0	0	0	0
Linguistics .....	38	61	72	72	82	80	60	63	63
Political science .....	143	245	216	249	197	229	105	159	150
Sociology .....	136	67	141	91	102	102	107	124	107
Sociology/anthropology .....	81	51	49	27	28	27	37	39	53
Social sciences, n.e.c. ....	102	112	110	104	92	112	110	99	87
Total, health fields .....	124	117	135	122	117	112	150	126	189
Dentistry .....	0	0	0	0	0	0	0	0	0
Neurology .....	0	0	0	0	0	0	0	0	0
Nursing .....	47	29	34	28	31	26	24	0	34
Pharmaceutical sciences .....	13	13	16	15	14	22	31	30	38
Preventive medicine/community health .....	10	0	0	0	0	0	0	0	0
Speech pathology/audiology .....	28	49	51	51	46	38	19	24	24
Veterinary sciences .....	26	23	24	17	17	17	19	11	11
Clinical medicine, n.e.c. ....	0	3	0	0	0	0	57	61	82
Health related, n.e.c. ....	0	0	10	5	9	9	0	0	0

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table B-52. Full-time science and engineering graduate students in historically black colleges and universities, by type and source of major support: 1983-91**

Page 1 of 2

Type and source of major support	1983	1984	1985	1986	1987	1988	1989	1990	1991
<b>Total, all types</b>									
Total, all sources	2,231	2,357	2,335	2,142	2,091	2,285	2,108	2,077	2,339
Federal, total	538	585	692	541	523	601	607	593	768
Dept of Defense	33	50	38	54	52	57	73	57	66
Dept of HHS, total	215	209	199	191	179	189	234	183	260
NIH	187	181	165	151	152	160	204	174	227
Other HHS	28	28	34	40	27	29	30	9	33
NSF	50	39	25	33	43	51	47	35	65
USDA	NA	NA	56	38	68	50	47	56	54
All other Federal	240	287	374	225	181	254	206	262	323
Institutional support	642	592	411	462	495	534	555	653	626
Other outside support, total	136	114	105	172	200	195	208	115	152
All other U.S.	98	94	80	150	155	154	167	101	135
Foreign	40	20	25	22	45	41	41	14	17
Self-support	915	1,066	1,127	967	873	955	738	716	793
<b>Fellowships</b>									
Total, all sources	238	252	264	163	231	273	233	275	299
Federal, total	64	99	145	92	102	103	91	124	152
Dept of Defense	0	3	0	0	13	3	4	3	6
Dept of HHS, total	10	18	30	16	6	14	11	24	22
NIH	5	13	21	7	6	6	1	20	20
Other HHS	5	5	9	9	0	8	10	4	2
NSF	10	7	10	5	15	9	7	8	14
USDA	NA	NA	2	0	4	2	0	0	0
All other Federal	44	71	103	71	64	75	69	89	110
Institutional support	97	100	70	53	93	123	89	114	103
Other outside support, total	75	53	49	18	36	47	53	37	44
All other U.S.	53	39	31	10	26	38	43	34	36
Foreign	22	14	18	8	10	9	10	3	8
Self-support	0	0	0	0	0	0	0	0	0
<b>Traineeships</b>									
Total, all sources	210	192	158	162	148	113	129	140	201
Federal, total	175	169	139	114	104	72	112	116	182
Dept of Defense	5	1	0	0	1	0	0	15	4
Dept of HHS, total	110	111	97	99	93	60	107	82	148
NIH	93	90	72	73	67	39	87	81	124
Other HHS	17	21	25	26	26	21	20	1	24
NSF	19	8	1	2	1	0	0	0	2
USDA	NA	NA	0	0	4	0	0	0	0
All other Federal	41	49	41	13	5	12	5	19	28
Institutional support	25	18	18	38	33	36	17	1	3
Other outside support, total	10	5	1	10	11	5	0	23	16
All other U.S.	0	1	1	3	2	0	0	23	16
Foreign	10	4	0	7	9	5	0	0	0
Self-support	0	0	0	0	0	0	0	0	0
<b>Research assistantships</b>									
Total, all sources	362	423	329	343	332	427	446	423	498
Federal, total	243	274	274	252	256	329	334	270	359
Dept of Defense	27	45	38	40	27	41	56	39	55
Dept of HHS, total	85	76	65	67	61	99	104	71	83
NIH	80	76	65	62	61	99	104	67	78
Other HHS	5	0	0	5	0	0	0	4	5
NSF	18	18	14	23	23	37	35	26	29
USDA	NA	NA	48	31	53	45	46	54	54
All other Federal	113	135	109	91	92	107	93	80	138
Institutional support	103	118	38	70	55	76	92	133	117
Other outside support, total	16	31	17	21	21	22	20	20	22
All other U.S.	15	30	11	15	18	20	15	15	17
Foreign	1	1	6	6	3	2	5	5	5
Self-support	0	0	0	0	0	0	0	0	0
<b>Teaching assistantships</b>									
Total, all sources	357	323	307	306	304	341	307	322	340
Federal, total	3	7	52	35	11	68	26	44	52
Dept of Defense	0	0	0	0	0	0	0	0	0
Dept of HHS, total	3	2	2	2	4	9	3	1	4
NIH	3	0	2	2	4	9	3	1	2
Other HHS	0	2	0	0	0	0	0	0	2
NSF	0	4	0	3	1	5	4	0	18
USDA	NA	NA	0	0	0	2	0	0	0
All other Federal	0	1	50	30	6	52	19	43	30
Institutional support	350	296	236	250	257	241	247	276	274
Other outside support, total	4	20	19	21	36	32	34	2	14
All other U.S.	4	20	19	21	36	32	34	2	14
Foreign	0	0	0	0	0	0	0	0	0
Self-support	0	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE(S) at end of table.

**Table B-52. Full-time science and engineering graduate students in historically black colleges and universities, by type and source of major support: 1983-91**

Page 2 of 2

Type and source of major support	1983	1984	1985	1986	1987	1988	1989	1990	1991
Other types of support									
Total, all sources	1,066	1,167	1,277	1,168	1,076	1,131	993	917	1,001
Federal, total	53	36	82	48	50	29	44	39	23
Dept of Defense	1	1	0	14	11	13	13	0	1
Dept of HHS, total	7	2	5	7	15	7	9	5	3
NIH	6	2	5	7	14	7	9	5	3
Other HHS	1	0	0	0	1	0	0	0	0
NSF	3	2	0	0	3	0	1	1	2
USDA	NA	NA	6	7	7	1	1	2	0
All other Federal	42	31	71	20	14	8	20	31	17
Institutional support	67	60	49	51	57	56	110	129	129
Other outside support, total	31	5	19	102	96	89	101	33	56
All other U.S.	24	4	18	101	73	64	75	27	52
Foreign	7	1	1	1	23	25	26	6	4
Self-support	915	1,066	1,127	967	873	955	738	716	793

KEY: NA = Not available

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table B-53. Part-time science and engineering graduate students in historically black colleges and universities, by field: 1983-91

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields .....	1,215	1,518	1,252	1,290	1,111	1,189	1,321	1,487	1,516
Total, science/engineering fields .....	1,162	1,453	1,204	1,248	1,068	1,146	1,270	1,447	1,380
Engineering, total .....	116	147	69	177	87	84	93	158	107
Aerospace .....	0	0	0	0	0	0	0	0	0
Agricultural .....	0	0	0	0	0	0	0	0	0
Biomedical .....	0	0	0	0	0	0	0	0	0
Chemical .....	0	0	0	0	0	0	0	0	0
Civil .....	13	27	4	15	17	17	15	32	43
Electrical .....	10	29	10	16	25	7	25	51	7
Engineering science .....	0	0	0	0	0	0	0	0	0
Industrial .....	13	15	2	0	0	6	7	8	10
Mechanical .....	13	30	10	3	5	10	8	28	13
Metallurgical/materials .....	0	0	0	0	0	0	0	0	0
Mining .....	0	0	0	0	0	0	0	0	0
Nuclear .....	0	0	0	0	0	0	0	0	0
Petroleum .....	0	0	0	0	0	0	0	0	0
Engineering, n.e.c. ....	67	46	43	143	40	44	38	39	33
Sciences, total .....	1,046	1,306	1,135	1,071	981	1,062	1,177	1,289	1,273
Physical sciences .....	48	89	58	60	56	56	104	107	97
Astronomy .....	0	0	0	0	0	0	0	0	0
Chemistry .....	28	64	34	27	32	24	77	68	59
Physics .....	8	13	7	20	23	24	20	36	34
Physical sciences, n.e.c. ....	12	12	17	13	1	8	7	3	4
Earth, atmospheric, & ocean sciences .....	5	14	9	12	7	18	10	24	31
Atmospheric sciences .....	0	0	0	0	0	0	0	0	0
Geosciences .....	5	14	9	12	7	7	0	4	5
Oceanography .....	0	0	0	0	0	11	10	17	18
Earth, atmos., & ocean sci., n.e.c. ....	0	0	0	0	0	0	0	3	10
Mathematical sciences .....	98	127	99	122	91	83	95	84	83
Computer sciences .....	86	118	92	73	66	68	121	188	176
Agricultural sciences .....	43	30	39	29	16	23	21	25	23
Biological sciences .....	82	114	110	86	84	115	108	88	107
Anatomy .....	0	0	0	0	0	0	0	0	0
Biochemistry .....	0	0	0	0	0	0	0	0	0
Biology .....	83	83	95	67	68	78	77	36	66
Biometry/epidemiology .....	0	0	0	0	0	0	0	0	0
Biophysics .....	0	0	0	0	0	0	0	0	0
Botany .....	12	12	5	6	6	7	12	29	24
Cell biology .....	0	0	0	0	0	0	0	0	0
Ecology .....	0	0	0	0	0	0	0	0	0
Entomology/parasitology .....	0	0	0	0	0	0	0	0	0
Genetics .....	2	2	3	3	0	4	4	4	2
Microbiology .....	0	0	1	0	0	0	0	0	0
Nutrition .....	0	0	0	2	1	13	10	9	4
Pathology .....	0	0	0	0	0	0	0	0	0
Pharmacology .....	2	1	0	1	0	1	0	0	0
Physiology .....	0	0	1	1	0	1	0	0	0
Zoology .....	2	11	2	5	5	5	0	8	7
Biosciences, n.e.c. ....	1	5	3	1	4	6	4	2	4
Psychology .....	252	263	245	236	211	241	243	273	248
Social sciences .....	432	551	483	453	450	458	475	500	508
Agricultural economics .....	3	13	22	13	15	19	22	14	17
Anthropology .....	0	0	0	0	0	0	0	0	0
Economics (except agricultural) .....	46	76	58	56	37	44	36	42	24
Geography .....	0	0	0	0	0	0	0	0	0
History and philosophy of science .....	0	0	0	0	0	0	0	0	0
Linguistics .....	5	76	57	57	62	56	77	71	79
Political science .....	154	147	129	140	170	170	173	166	170
Sociology .....	78	76	85	88	93	83	73	87	112
Sociology/anthropology .....	32	52	31	33	34	31	21	22	12
Social sciences, n.e.c. ....	114	111	101	66	39	55	73	98	94
Total, health fields .....	53	65	48	42	43	43	51	40	136
Dentistry .....	0	0	0	0	0	0	0	0	0
Neurology .....	0	0	0	0	0	0	0	0	0
Nursing .....	21	30	12	10	19	19	17	0	27
Pharmaceutical sciences .....	0	0	0	0	0	0	0	11	55
Preventive medicine/community health .....	1	0	0	0	0	0	0	0	0
Speech pathology/audiology .....	31	32	33	29	21	24	23	21	37
Veterinary sciences .....	0	3	3	3	3	0	0	8	8
Clinical medicine, n.e.c. ....	0	0	0	0	0	0	0	0	9
Health related, n.e.c. ....	0	0	0	0	0	0	0	0	0

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table B-54. Science and engineering graduate students in land-grant institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields .....	123,937	124,877	126,901	131,199	131,516	133,296	136,500	138,012	145,328
Total, science & engineering fields .....	114,274	115,069	116,884	121,022	121,378	122,754	125,412	127,623	132,289
Engineering, total .....	30,630	30,460	31,422	33,992	34,769	34,968	35,760	36,677	38,951
Aerospace .....	856	838	902	973	997	1,078	1,148	1,257	1,398
Agricultural .....	900	883	850	929	937	929	922	844	873
Biomedical .....	325	328	347	415	482	487	542	540	586
Chemical .....	2,962	2,851	2,814	2,841	2,889	2,742	2,787	2,908	2,982
Civil .....	5,407	5,484	5,480	5,564	5,579	5,845	5,881	6,087	6,618
Electrical .....	7,505	7,770	8,377	9,134	9,657	9,717	9,972	10,059	10,409
Engineering science .....	628	632	685	878	855	827	895	877	1,019
Industrial .....	2,309	2,410	2,773	3,048	2,997	2,836	3,068	3,032	3,562
Mechanical .....	5,182	5,365	5,267	5,804	6,040	6,138	6,021	6,284	6,589
Metallurgical/materials .....	1,403	1,544	1,665	1,796	1,803	1,828	1,977	2,146	2,245
Mining .....	264	270	260	296	287	269	211	229	232
Nuclear .....	803	806	828	890	880	878	903	883	898
Petroleum .....	197	225	201	213	239	202	212	183	219
Engineering, n.e.c. ....	1,859	1,074	973	1,211	1,127	1,192	1,218	1,348	1,321
Sciences, total .....	83,644	84,609	85,462	87,030	86,607	87,786	89,652	90,946	93,338
Physical sciences .....	11,516	11,783	12,102	12,589	12,775	12,959	13,094	13,221	13,302
Astronomy .....	244	257	277	287	286	287	306	332	340
Chemistry .....	6,856	6,917	7,115	7,249	7,299	7,269	7,345	7,307	7,259
Physics .....	4,360	4,542	4,661	5,001	5,149	5,371	5,410	5,551	5,668
Physical sciences, n.e.c. ....	56	67	49	52	41	32	33	31	35
Earth, atmospheric, & ocean sciences .....	6,338	6,329	6,295	6,247	5,885	5,727	5,786	5,587	5,678
Atmospheric sciences .....	533	548	564	555	540	554	574	593	625
Geosciences .....	3,940	3,964	3,882	3,742	3,380	3,197	3,092	2,885	2,798
Oceanography .....	1,058	1,074	1,060	1,107	1,105	1,078	1,225	1,228	1,185
Earth, atmos., & ocean sci., n.e.c. ....	809	743	789	843	860	898	895	881	1,070
Mathematical sciences .....	5,191	5,461	5,619	5,958	6,296	6,651	6,783	7,057	7,237
Computer sciences .....	4,858	5,393	6,059	6,258	6,378	6,469	6,567	6,765	6,874
Agricultural sciences .....	9,971	9,722	9,280	9,291	9,056	8,941	8,875	8,941	9,053
Biological sciences .....	18,828	18,886	19,001	19,225	19,160	19,331	19,688	19,557	20,286
Anatomy .....	342	342	311	298	305	342	334	304	313
Biochemistry .....	1,844	1,958	2,105	2,213	2,083	2,139	2,156	2,171	2,217
Biology .....	2,311	2,338	2,343	2,341	2,469	2,502	2,672	2,629	2,827
Biometry/epidemiology .....	124	108	123	199	259	265	270	259	389
Biophysics .....	115	110	155	184	173	167	209	181	201
Botany .....	2,527	2,504	2,491	2,484	2,324	2,314	2,285	2,010	2,046
Cell biology .....	394	453	498	615	749	818	887	974	1,099
Ecology .....	650	685	659	629	590	619	636	636	640
Entomology/parasitology .....	1,264	1,226	1,170	1,148	1,065	1,057	1,029	1,042	1,039
Genetics .....	538	539	555	620	647	603	605	590	650
Microbiology .....	1,995	1,996	2,104	1,998	2,027	2,140	2,111	2,162	2,105
Nutrition .....	2,703	2,724	2,720	2,746	2,682	2,603	2,601	2,670	2,608
Pathology .....	581	527	522	513	527	484	515	491	565
Pharmacology .....	763	762	741	752	744	766	858	879	929
Physiology .....	783	810	845	807	833	829	843	842	832
Zoology .....	1,597	1,524	1,381	1,372	1,374	1,317	1,291	1,314	1,378
Biosciences, n.e.c. ....	315	280	278	346	309	366	386	404	448
Psychology .....	6,977	7,130	7,369	7,386	7,065	7,530	7,818	8,002	8,299
Social sciences .....	19,967	19,905	19,737	20,078	19,992	20,178	21,041	21,816	22,609
Agricultural economics .....	2,109	2,095	2,065	2,051	2,017	2,063	2,087	2,071	2,120
Anthropology .....	1,511	1,533	1,466	1,484	1,571	1,598	1,654	1,782	1,856
Economics (except agricultural) .....	4,102	3,914	3,917	3,920	3,797	3,623	3,809	3,868	4,115
Geography .....	1,066	1,056	1,017	1,097	1,171	1,137	1,296	1,330	1,412
History and philosophy of science .....	68	65	59	72	74	91	115	136	141
Linguistics .....	676	714	658	763	835	812	874	927	961
Political science .....	5,412	5,523	5,555	5,644	5,545	5,750	5,899	6,189	6,373
Sociology .....	2,224	2,151	2,179	2,219	2,294	2,354	2,478	2,575	2,718
Sociology/anthropology .....	290	276	274	303	301	344	373	428	307
Social sciences, n.e.c. ....	2,509	2,578	2,547	2,515	2,387	2,406	2,456	2,512	2,806
Total, health fields .....	9,663	9,808	10,017	10,177	10,140	10,542	11,088	10,389	13,039
Dentistry .....	157	188	185	194	197	223	195	199	234
Neurology .....	89	110	118	122	139	180	210	221	273
Nursing .....	3,483	3,480	3,324	3,582	3,467	3,411	3,706	2,766	4,734
Pharmaceutical sciences .....	681	649	878	921	854	903	1,000	888	1,041
Preventive medicine/community health .....	2,093	2,079	2,155	1,912	2,020	2,181	2,250	2,453	2,431
Speech pathology/audiology .....	1,842	1,680	1,765	1,775	1,504	1,629	1,607	1,592	1,869
Veterinary sciences .....	414	494	569	567	670	694	733	813	794
Clinical medicine, n.e.c. ....	407	382	381	390	365	392	431	362	408
Health related, n.e.c. ....	517	546	644	714	924	929	956	1,075	1,255

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



Table B-55. Male science and engineering graduate students in land-grant institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields .....	85,896	86,155	87,420	90,178	90,355	90,667	91,552	92,347	95,363
Total, science & engineering fields .....	83,205	83,499	84,522	87,451	87,450	87,655	88,561	89,397	92,160
Engineering, total .....	27,488	27,199	27,940	30,104	30,562	30,697	31,204	31,649	33,620
Aerospace .....	817	794	851	904	932	1,012	1,077	1,173	1,278
Agricultural .....	829	806	775	850	850	852	844	750	761
Biomedical .....	256	258	272	331	374	370	400	389	412
Chemical .....	2,600	2,495	2,465	2,476	2,462	2,328	2,360	2,397	2,449
Civil .....	4,713	4,763	4,714	4,805	4,753	4,934	4,850	5,046	5,435
Electrical .....	6,910	7,089	7,674	8,289	8,775	8,799	8,972	8,927	9,252
Engineering science .....	568	548	593	774	746	729	794	755	881
Industrial .....	1,894	1,964	2,291	2,516	2,451	2,364	2,506	2,466	2,983
Mechanical .....	4,844	5,012	4,898	5,363	5,551	5,608	5,507	5,749	6,043
Metallurgical/materials .....	1,208	1,341	1,395	1,479	1,451	1,483	1,612	1,732	1,807
Mining .....	268	247	245	277	265	247	192	202	211
Nuclear .....	747	741	754	802	794	789	795	770	774
Petroleum .....	165	207	190	207	224	192	206	176	206
Engineering, n.e.c. ....	1,669	934	823	1,031	934	990	989	1,117	1,128
Sciences, total .....	55,717	56,300	56,582	57,347	56,888	56,958	57,357	57,748	58,540
Physical sciences .....	9,325	9,524	9,726	10,043	10,129	10,149	10,171	10,236	10,288
Astronomy .....	198	209	225	230	238	233	248	252	258
Chemistry .....	5,180	5,214	5,375	5,361	5,356	5,191	5,198	5,138	5,084
Physics .....	3,912	4,064	4,089	4,420	4,515	4,711	4,709	4,831	4,911
Physical sciences, n.e.c. ....	35	37	27	32	20	14	16	15	15
Earth, atmospheric, & ocean sciences .....	4,812	4,829	4,711	4,665	4,377	4,227	4,192	4,015	4,049
Atmospheric sciences .....	456	470	479	449	444	465	472	483	504
Geosciences .....	3,026	3,065	2,939	2,876	2,568	2,418	2,338	2,165	2,066
Oceanography .....	768	774	732	757	771	743	813	819	781
Earth, atmos. & ocean sci., n.e.c. ....	562	520	561	583	594	601	569	548	698
Mathematical sciences .....	3,823	3,978	4,054	4,281	4,546	4,806	4,800	5,039	5,118
Computer sciences .....	3,679	4,088	4,656	4,889	5,102	5,144	5,307	5,452	5,437
Agricultural sciences .....	7,468	7,216	6,873	6,893	6,636	6,488	6,372	6,303	6,262
Biological sciences .....	11,259	11,210	11,303	11,240	11,103	11,114	11,157	11,026	11,311
Anatomy .....	194	191	173	161	164	185	185	161	154
Biochemistry .....	1,171	1,250	1,340	1,375	1,274	1,280	1,299	1,309	1,316
Biology .....	1,363	1,400	1,370	1,393	1,488	1,475	1,538	1,550	1,635
Biometry/epidemiology .....	59	55	67	104	111	121	103	103	137
Biophysics .....	84	88	122	135	147	136	167	135	147
Botany .....	1,605	1,564	1,530	1,556	1,408	1,419	1,415	1,233	1,245
Cell biology .....	277	307	340	384	464	494	518	539	602
Ecology .....	435	458	432	398	370	388	392	397	377
Entomology/parasitology .....	939	914	867	829	784	757	716	720	740
Genetics .....	299	303	337	349	351	338	331	326	363
Microbiology .....	1,154	1,144	1,245	1,149	1,156	1,221	1,155	1,175	1,132
Nutrition .....	1,110	1,097	1,123	1,116	1,100	1,029	1,022	1,073	1,059
Pathology .....	375	343	326	320	318	302	312	295	345
Pharmacology .....	483	463	456	449	438	472	486	506	494
Physiology .....	471	512	515	464	486	489	490	483	471
Zoology .....	1,061	973	899	863	869	810	812	801	837
Biosciences, n.e.c. ....	179	150	161	195	175	198	216	220	257
Psychology .....	3,025	3,033	3,097	3,081	2,761	2,847	2,923	2,912	2,980
Social sciences .....	12,326	12,422	12,162	12,255	12,234	12,183	12,435	12,765	13,115
Agricultural economics .....	1,663	1,645	1,595	1,583	1,542	1,570	1,561	1,521	1,550
Anthropology .....	705	698	656	652	691	694	699	753	805
Economics (except agricultural) .....	3,018	2,921	2,877	2,853	2,800	2,655	2,749	2,765	2,896
Geography .....	703	708	674	722	756	761	860	869	896
History and philosophy of science .....	46	41	41	50	51	63	76	90	91
Linguistics .....	282	282	275	331	388	358	395	434	451
Political science .....	3,263	3,437	3,390	3,431	3,411	3,433	3,432	3,593	3,674
Sociology .....	1,074	1,064	1,059	1,053	1,100	1,130	1,134	1,124	1,169
Sociology/anthropology .....	156	138	132	142	149	159	174	190	142
Social sciences, n.e.c. ....	1,418	1,488	1,463	1,438	1,386	1,360	1,355	1,426	1,441
Total, health fields .....	2,691	2,656	2,898	2,727	2,905	3,012	2,991	2,950	3,203
Dentistry .....	132	149	145	161	145	161	136	134	144
Neurology .....	68	65	67	72	86	106	126	127	159
Nursing .....	126	128	136	141	174	159	169	119	204
Pharmaceutical sciences .....	610	567	583	589	535	546	602	536	616
Preventive medicine/community health .....	767	745	761	698	831	881	795	865	857
Speech pathology/audiology .....	284	261	337	262	198	231	181	190	173
Veterinary sciences .....	266	309	355	349	412	414	423	457	469
Clinical medicine, n.e.c. ....	250	234	234	230	231	236	257	228	240
Health related, n.e.c. ....	188	198	280	225	293	278	302	294	341

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table B-56. Female science and engineering graduate students in land-grant institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields	38,041	38,722	39,481	41,021	41,161	42,629	44,948	45,665	49,965
Total, science & engineering fields	31,069	31,570	32,362	33,571	33,926	35,099	36,851	38,228	40,129
Engineering, total	3,142	3,261	3,482	3,888	4,207	4,271	4,556	5,028	5,331
Aerospace	39	44	51	69	65	66	71	84	120
Agricultural	71	77	75	79	87	77	78	94	112
Biomedical	69	70	75	84	108	117	142	151	174
Chemical	362	356	349	365	427	414	427	511	533
Civil	694	701	766	759	826	911	931	1,041	1,183
Electrical	595	681	703	845	882	918	1,000	1,132	1,157
Engineering science	60	84	92	104	109	98	101	122	138
Industrial	415	446	482	532	546	472	562	566	570
Mechanical	338	353	369	441	489	530	514	535	546
Metallurgical/materials	195	203	270	317	352	345	365	414	438
Mining	26	23	15	19	22	22	19	27	21
Nuclear	56	65	74	88	86	89	111	113	124
Petroleum	32	18	11	6	15	10	6	7	13
Engineering, n.e.c.	190	140	150	180	193	202	229	231	193
Sciences, total	27,927	28,309	28,880	29,683	29,719	30,828	32,295	33,198	34,798
Physical sciences	2,191	2,259	2,376	2,546	2,646	2,810	2,923	2,985	3,034
Astronomy	46	48	52	57	48	54	58	80	82
Chemistry	1,676	1,703	1,740	1,888	1,943	2,078	2,147	2,169	2,175
Physics	448	478	562	581	634	660	701	720	757
Physical sciences, n.e.c.	21	30	22	20	21	18	17	16	20
Earth, atmospheric, & ocean sciences	1,526	1,500	1,584	1,582	1,508	1,500	1,594	1,572	1,629
Atmospheric sciences	77	78	85	106	96	89	102	110	121
Geosciences	914	899	943	866	812	779	754	720	732
Oceanography	288	300	328	350	334	335	412	409	404
Earth, atmos., & ocean sci., n.e.c.	247	223	228	260	266	297	326	333	372
Mathematical sciences	1,388	1,483	1,565	1,675	1,750	1,845	1,983	2,018	2,119
Computer sciences	1,179	1,305	1,403	1,369	1,276	1,325	1,280	1,313	1,437
Agricultural sciences	2,503	2,506	2,407	2,398	2,420	2,453	2,503	2,638	2,791
Biological sciences	7,567	7,676	7,698	7,985	8,057	8,217	8,531	8,531	8,975
Anatomy	148	151	138	137	141	157	149	143	159
Biochemistry	673	708	765	838	809	859	857	862	901
Biology	948	938	973	948	981	1,027	1,134	1,079	1,192
Biometry/epidemiology	65	53	56	95	148	144	167	155	252
Biophysics	31	24	33	29	26	31	42	46	54
Botany	922	940	961	908	916	895	870	777	801
Cell biology	117	146	158	231	285	324	369	435	497
Ecology	215	227	227	231	220	231	244	239	263
Entomology/parasitology	325	312	303	319	281	300	313	322	299
Genetics	239	236	218	271	296	265	274	264	287
Microbiology	841	852	859	849	871	919	956	987	973
Nutrition	1,593	1,627	1,597	1,630	1,582	1,574	1,579	1,597	1,549
Pathology	206	184	196	193	209	182	203	196	220
Pharmacology	280	299	285	303	306	294	372	373	435
Physiology	292	298	330	343	347	340	353	359	361
Zoology	536	551	482	509	505	507	479	513	541
Biosciences, n.e.c.	136	130	117	15	134	168	170	184	191
Psychology	3,952	4,097	4,272	4,305	4,304	4,683	4,895	5,090	5,319
Social sciences	7,641	7,483	7,575	7,823	7,758	7,995	8,606	9,051	9,494
Agricultural economics	446	450	470	468	475	493	526	550	570
Anthropology	808	835	810	842	880	904	955	1,029	1,051
Economics (except agricultural)	1,084	993	1,040	1,067	997	968	1,060	1,101	1,219
Geography	363	348	343	375	415	376	436	461	516
History and philosophy of science	22	24	18	22	23	28	39	46	50
Linguistics	394	432	383	432	467	454	479	493	510
Political science	2,149	2,086	2,165	2,213	2,134	2,317	2,467	2,596	2,699
Sociology	1,150	1,087	1,120	1,166	1,194	1,224	1,344	1,451	1,549
Sociology/anthropology	134	138	142	161	152	185	199	238	165
Social sciences, n.e.c.	1,093	1,090	1,084	1,077	1,021	1,046	1,101	1,086	1,165
Total, health fields	6,972	7,152	7,119	7,450	7,235	7,530	8,097	7,439	9,836
Dentistry	25	39	40	33	52	62	59	65	90
Neurology	21	45	49	50	53	74	84	94	114
Nursing	3,337	3,352	3,188	3,441	3,293	3,252	3,537	2,647	4,530
Pharmaceutical sciences	271	282	295	332	319	357	398	352	425
Preventive medicine/community health	1,326	1,334	1,394	1,214	1,189	1,300	1,455	1,588	1,574
Speech pathology/audiology	1,358	1,419	1,428	1,513	1,306	1,398	1,426	1,402	1,696
Veterinary sciences	148	185	214	218	258	280	310	356	325
Clinical medicine, n.e.c.	157	148	147	160	134	156	174	154	168
Health related, n.e.c.	329	348	364	489	631	651	654	781	914

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS. Survey of Graduate Students and Postdoctorates in Science and Engineering

Table B-57. Full-time science and engineering graduate students in land-grant institutions, by field: 1983-91

Page 1 of 1

Field	1983	1994	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields	98,388	100,004	100,585	104,746	105,305	106,617	108,345	109,601	115,046
Total, science/engineering fields	91,561	93,006	93,448	97,593	98,243	99,263	101,063	102,483	106,646
Engineering, total	23,339	23,885	24,141	26,210	26,741	27,244	27,767	28,274	30,123
Aerospace	774	726	783	848	888	969	1,047	1,103	1,255
Agricultural	715	713	685	770	819	786	757	716	743
Biomedical	250	278	305	368	441	400	419	428	487
Chemical	2,617	2,529	2,449	2,535	2,628	2,457	2,512	2,616	2,699
Civil	4,444	4,470	4,412	4,589	4,601	4,843	4,790	4,956	5,266
Electrical	5,530	5,876	6,100	6,687	6,876	7,133	7,394	7,380	7,906
Engineering science	387	352	360	462	415	391	411	419	540
Industrial	1,330	1,392	1,464	1,600	1,563	1,562	1,683	1,680	1,883
Mechanical	4,133	4,222	4,215	4,651	4,843	5,006	4,949	5,088	5,292
Metallurgical/materials	1,261	1,380	1,492	1,610	1,627	1,636	1,799	1,881	1,951
Mining	242	242	223	268	243	238	171	180	178
Nuclear	710	702	722	749	727	739	754	769	779
Petroleum	197	219	184	194	216	175	197	156	193
Engineering, n.e.c.	749	784	747	881	856	909	884	902	951
Sciences, total	68,222	69,121	69,307	71,383	71,502	72,019	73,296	74,209	76,523
Physical sciences	10,647	10,932	11,113	11,626	11,901	11,987	12,117	12,132	12,274
Astronomy	230	237	259	269	278	280	303	328	333
Chemistry	6,297	6,399	6,477	6,666	6,782	6,729	6,788	6,711	6,682
Physics	4,072	4,234	4,341	4,656	4,804	4,951	5,000	5,069	5,228
Physical sciences, n.e.c.	48	62	36	35	37	27	26	24	31
Earth, atmospheric, & ocean sciences	5,273	5,157	4,960	5,013	4,618	4,446	4,574	4,423	4,432
Atmospheric sciences	463	469	510	496	486	509	516	542	568
Geosciences	3,361	3,327	3,129	3,046	2,707	2,526	2,480	2,296	2,257
Oceanography	876	861	795	892	874	683	1,055	1,065	1,029
Earth, atmos., & ocean sci., n.e.c.	573	500	526	579	551	528	523	520	578
Mathematical sciences	4,439	4,612	4,831	5,100	5,531	5,744	5,920	6,015	6,123
Computer sciences	3,459	3,768	4,466	4,762	4,828	4,697	4,752	4,985	5,027
Agricultural sciences	8,229	8,100	7,645	7,768	7,662	7,593	7,383	7,431	7,517
Biological sciences	16,350	16,554	16,412	16,842	16,913	17,002	17,405	17,212	17,965
Anatomy	303	292	266	263	271	306	310	278	277
Biochemistry	1,741	1,869	2,032	2,101	2,014	2,064	2,060	2,080	2,133
Biology	1,994	2,050	1,963	2,001	2,087	2,113	2,325	2,294	2,505
Biometry/epidemiology	102	92	103	153	199	198	215	207	336
Biophysics	108	104	147	158	164	164	203	179	201
Botany	2,258	2,215	2,124	2,164	2,024	2,026	1,992	1,779	1,796
Cell biology	377	430	466	579	706	776	842	921	1,041
Ecology	596	634	623	591	546	573	582	581	586
Entomology/parasitology	1,126	1,093	1,010	986	917	923	895	891	921
Genetics	512	522	534	599	620	562	579	563	626
Microbiology	1,713	1,759	1,821	1,746	1,828	1,904	1,860	1,917	1,880
Nutrition	2,139	2,188	2,171	2,253	2,188	2,064	2,066	2,104	2,112
Pathology	425	391	380	405	460	435	451	421	439
Pharmacology	709	702	685	703	698	714	796	830	869
Physiology	692	750	763	740	766	745	788	787	787
Zoology	1,284	1,220	1,110	1,135	1,181	1,128	1,116	1,054	1,119
Biosciences, n.e.c.	271	243	194	265	244	307	325	326	357
Psychology	5,332	5,470	5,510	5,644	5,560	5,838	5,972	5,956	6,399
Social sciences	14,493	14,530	14,370	14,628	14,489	14,712	15,173	16,055	16,786
Agricultural economics	1,896	1,869	1,807	1,788	1,703	1,736	1,737	1,794	1,806
Anthropology	1,148	1,182	1,090	1,185	1,209	1,284	1,279	1,365	1,457
Economics (except agricultural)	3,396	3,191	3,204	3,144	3,071	2,994	3,092	3,208	3,473
Geography	848	844	845	895	948	903	986	1,038	1,093
History and philosophy of science	58	51	50	62	64	80	92	120	122
Linguistics	604	633	587	670	744	731	770	829	860
Political science	2,908	3,134	3,175	3,148	3,076	3,220	3,358	3,491	3,697
Sociology	1,740	1,743	1,716	1,854	1,866	1,928	1,948	2,089	2,141
Sociology/anthropology	237	219	215	219	222	255	275	309	232
Social sciences, n.e.c.	1,656	1,664	1,681	1,663	1,586	1,581	1,636	1,812	1,905
Total, health fields	6,827	6,998	7,137	7,153	7,062	7,354	7,582	7,118	8,400
Dentistry	144	181	172	180	188	201	170	185	206
Neurology	87	109	115	120	138	177	198	210	282
Nursing	1,805	1,784	1,689	1,732	1,669	1,638	1,786	1,167	1,943
Pharmaceutical sciences	764	745	764	799	764	799	865	761	884
Preventive medicine/community health	1,713	1,724	1,714	1,595	1,611	1,696	1,619	1,770	1,671
Speech pathology/audiology	1,310	1,362	1,420	1,427	1,219	1,323	1,312	1,307	1,528
Veterinary sciences	313	370	456	460	552	566	616	643	645
Clinical medicine, n.e.c.	342	331	344	334	316	341	378	344	373
Health related, n.e.c.	349	392	463	506	605	613	638	731	888

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table B-58. Full-time science and engineering graduate students in land-grant institutions, by type and source of major support: 1983-91**

Page 1 of 2

Type and source of major support	1983	1984	1985	1986	1987	1988	1989	1990	1991
<b>Total, all types</b>									
Total, all sources	98,388	100,004	100,585	104,746	105,305	106,817	108,645	109,601	115,046
Federal, total	20,794	21,006	21,788	22,834	24,358	24,953	25,739	26,081	27,725
Dept of Defense	2,514	2,638	2,518	2,880	3,374	3,648	3,763	3,478	3,498
Dept of HHS, total	5,130	5,269	5,764	5,792	6,032	6,361	6,374	6,298	6,784
NIH	3,797	3,827	3,876	4,122	4,517	4,773	4,853	4,937	5,321
Other HHS	1,338	1,442	1,888	1,670	1,515	1,588	1,521	1,359	1,463
NSF	4,627	4,743	4,900	5,223	5,571	5,657	5,911	5,969	6,239
USDA	NA	NA	1,924	2,093	2,397	2,309	2,437	2,377	2,698
All other Federal	8,520	8,356	8,680	8,846	8,984	8,978	7,254	7,963	8,506
Institutional support	41,168	42,990	43,330	46,109	46,709	47,333	48,813	48,995	50,278
Other outside support, total	11,359	11,188	12,084	11,831	11,118	11,265	11,520	11,967	12,054
All other U.S.	7,378	7,464	8,748	8,453	7,958	8,204	8,740	9,135	9,377
Foreign	3,981	3,724	3,336	3,378	3,160	3,061	2,780	2,832	2,677
Self-support	25,067	24,820	23,385	23,972	23,120	23,066	22,473	22,558	24,989
<b>Fellowships</b>									
Total, all sources	7,275	7,430	7,825	8,023	7,622	7,840	8,583	9,174	9,421
Federal, total	1,599	1,722	1,860	1,947	1,806	1,872	2,131	2,683	2,935
Dept of Defense	58	86	84	102	138	152	192	263	298
Dept of HHS, total	223	272	298	279	238	245	238	276	310
NIH	160	209	195	184	150	161	161	207	241
Other HHS	83	83	103	95	88	84	77	69	69
NSF	551	580	612	651	620	704	792	927	948
USDA	NA	NA	115	138	124	80	85	100	87
All other Federal	767	784	751	777	686	691	824	1,097	1,292
Institutional support	2,783	2,834	3,264	3,309	3,441	3,688	4,051	4,080	4,033
Other outside support, total	2,913	2,874	2,701	2,767	2,375	2,280	2,401	2,411	2,453
All other U.S.	1,467	1,477	1,523	1,577	1,338	1,221	1,419	1,450	1,556
Foreign	1,446	1,397	1,178	1,190	1,037	1,059	982	961	897
Self-support	0	0	0	0	0	0	0	0	0
<b>Traineeships</b>									
Total, all sources	4,358	4,367	4,371	4,293	4,104	4,112	3,942	4,003	4,378
Federal, total	2,768	2,733	2,876	2,703	2,661	2,687	2,626	2,729	3,142
Dept of Defense	83	45	12	20	62	77	69	59	94
Dept of HHS, total	2,240	2,248	2,434	2,323	2,228	2,313	2,084	2,092	2,360
NIH	1,290	1,188	1,120	1,125	1,217	1,205	1,174	1,305	1,511
Other HHS	950	1,060	1,314	1,198	1,011	1,108	910	787	849
NSF	31	9	9	9	23	14	20	34	69
USDA	NA	NA	52	32	71	31	35	51	30
All other Federal	434	431	369	319	277	252	418	493	589
Institutional support	1,112	1,168	1,073	1,185	1,043	1,064	1,003	1,018	1,016
Other outside support, total	478	446	422	405	400	361	313	256	220
All other U.S.	344	331	303	329	288	276	257	179	175
Foreign	134	115	119	76	114	85	56	77	45
Self-support	0	0	0	0	0	0	0	0	0
<b>Research assistantships</b>									
Total, all sources	28,872	30,013	31,525	33,740	35,553	37,030	39,082	39,139	41,000
Federal, total	15,362	15,151	15,632	16,705	18,395	18,949	19,743	19,301	20,469
Dept of Defense	2,061	2,058	1,948	2,180	2,773	3,031	3,094	2,707	2,741
Dept of HHS, total	2,538	2,617	2,894	3,060	3,367	3,639	3,895	3,811	3,982
NIH	2,256	2,320	2,468	2,725	2,997	3,267	3,381	3,330	3,465
Other HHS	282	297	426	335	370	372	514	481	517
NSF	4,014	4,036	4,171	4,464	4,833	4,884	5,024	4,923	5,143
USDA	NA	NA	1,632	1,799	2,116	2,077	2,223	2,116	2,468
All other Federal	6,749	6,440	4,987	5,202	5,306	5,338	5,507	5,744	6,135
Institutional support	8,910	10,137	10,073	11,661	11,846	12,214	13,214	13,359	13,845
Other outside support, total	4,600	4,725	5,820	5,374	5,312	5,867	6,125	6,479	6,686
All other U.S.	4,210	4,328	5,483	5,006	4,930	5,464	5,708	6,007	6,164
Foreign	390	397	337	368	382	403	417	472	522
Self-support	0	0	0	0	0	0	0	0	0
<b>Teaching assistantships</b>									
Total, all sources	26,102	26,699	27,117	27,601	27,895	27,992	28,413	28,130	28,711
Federal, total	137	111	186	169	184	246	224	275	175
Dept of Defense	0	0	0	0	0	0	0	0	0
Dept of HHS, total	21	14	35	34	87	57	61	24	28
NIH	19	11	17	20	67	52	57	18	24
Other HHS	2	3	18	14	20	5	4	6	4
NSF	4	7	10	9	8	19	25	41	42
USDA	NA	NA	38	31	12	35	27	37	30
All other Federal	112	90	103	95	77	135	111	173	75
Institutional support	25,807	26,392	26,799	27,332	27,586	27,641	28,030	27,675	28,388
Other outside support, total	158	196	132	100	125	105	159	180	148
All other U.S.	158	196	132	100	125	105	159	180	148
Foreign	0	0	0	0	0	0	0	0	0
Self-support	0	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE(S) at end of table.

**Table B-58. Full-time science and engineering graduate students in land-grant institutions,  
by type and source of major support: 1983-91**

Page 2 of 2

Type and source of major support	1983	1984	1985	1986	1987	1988	1989	1990	1991
Other types of support									
Total, all sources	31,781	31,495	29,747	31,089	30,131	29,643	28,625	29,155	31,536
Federal, total	928	1,289	1,232	1,310	1,312	1,199	1,015	1,093	1,004
Dept of Defense	332	449	474	578	401	388	408	427	365
Dept of HHS, total	111	118	103	96	112	107	96	93	104
NIH	72	99	78	68	86	88	80	77	80
Other HHS	39	19	27	28	26	19	16	16	24
NSF	27	111	98	90	87	56	50	44	37
USDA	NA	NA	87	93	74	88	67	73	83
All other Federal	458	811	470	453	638	562	394	458	415
Institutional support	2,578	2,439	2,121	2,622	2,793	2,726	2,615	2,863	2,996
Other outside support, total	3,210	2,947	3,009	3,185	2,906	2,652	2,522	2,641	2,547
All other U.S.	1,199	1,132	1,307	1,441	1,279	1,138	1,197	1,319	1,334
Foreign	2,011	1,815	1,702	1,744	1,627	1,514	1,325	1,322	1,213
Self-support	25,067	24,820	23,385	23,972	23,120	23,066	22,473	22,558	24,989

KEY: NA = Not available

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



Table B-59. Part-time science and engineering graduate students in land-grant institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields	25,549	24,873	26,316	26,453	26,211	26,679	27,855	28,411	30,282
Total, science/engineering fields	22,713	22,063	23,436	23,429	23,133	23,491	24,349	25,140	25,643
Engineering, total	7,291	6,575	7,281	7,782	8,028	7,724	7,993	8,403	8,828
Aerospace	82	112	119	125	111	109	101	154	143
Agricultural	185	170	165	159	118	143	165	128	130
Biomedical	75	50	42	47	41	87	123	112	99
Chemical	345	322	365	306	261	285	275	292	283
Civil	963	994	1,068	975	978	1,002	1,091	1,131	1,352
Electrical	1,975	1,894	2,277	2,447	2,781	2,584	2,578	2,679	2,503
Engineering science	241	280	325	416	440	436	484	458	479
Industrial	979	1,018	1,309	1,448	1,434	1,274	1,365	1,352	1,679
Mechanical	1,049	1,143	1,352	1,153	1,197	1,132	1,072	1,196	1,297
Metallurgical/materials	142	164	173	186	176	192	178	265	294
Mining	52	28	37	30	44	31	40	49	54
Nuclear	93	104	106	141	153	139	152	114	119
Petroleum	0	6	17	19	23	27	15	27	26
Engineering, n.e.c.	1,110	290	226	330	271	283	334	446	370
Sciences, total	15,422	15,488	16,155	15,647	15,105	15,767	16,356	16,737	16,815
Physical sciences	869	851	889	963	874	972	977	1,089	1,028
Astronomy	14	20	18	18	8	7	3	4	7
Chemistry	559	510	638	583	517	540	557	596	577
Physics	288	308	320	345	345	420	410	482	440
Physical sciences, n.e.c.	8	5	13	17	4	5	7	7	4
Earth, atmospheric, & ocean sciences	1,085	1,172	1,335	1,234	1,267	1,281	1,212	1,164	1,246
Atmospheric sciences	70	79	54	59	54	45	58	51	57
Geosciences	579	637	753	696	673	671	612	589	541
Oceanography	180	213	265	215	231	195	170	163	158
Earth, atmos., & ocean sci., n.e.c.	236	243	263	264	309	370	372	361	492
Mathematical sciences	752	849	788	856	765	907	863	1,042	1,114
Computer sciences	1,399	1,627	1,593	1,496	1,550	1,772	1,815	1,780	1,847
Agricultural sciences	1,742	1,622	1,635	1,523	1,394	1,348	1,492	1,510	1,536
Biological sciences	2,478	2,332	2,589	2,383	2,247	2,329	2,283	2,345	2,321
Anatomy	39	50	45	35	34	36	24	26	36
Biochemistry	103	89	73	112	69	75	96	91	84
Biology	317	268	380	340	382	389	347	335	322
Biometry/epidemiology	22	16	20	46	60	67	55	51	53
Biophysics	7	6	8	6	9	3	6	2	0
Botany	269	289	367	300	300	288	293	231	250
Cell biology	17	23	12	36	43	42	45	53	58
Ecology	54	51	36	38	44	46	54	55	54
Entomology/parasitology	138	133	180	162	148	134	134	151	118
Genetics	26	17	21	21	27	41	26	27	24
Microbiology	282	237	283	252	199	236	251	245	225
Nutrition	564	536	549	493	494	539	535	566	496
Pathology	158	136	142	108	67	49	64	70	126
Pharmacology	54	60	56	49	46	52	62	49	60
Physiology	71	60	82	67	67	84	55	55	65
Zoology	313	304	271	237	193	189	175	260	259
Biosciences, n.e.c.	44	37	64	81	65	59	61	78	91
Psychology	1,645	1,660	1,859	1,742	1,505	1,692	1,846	2,046	1,900
Social sciences	5,474	5,375	5,367	5,450	5,503	5,466	5,868	5,761	5,823
Agricultural economics	213	226	258	263	314	327	350	277	314
Anthropology	363	351	376	309	362	314	375	417	399
Economics (except agricultural)	708	723	713	776	726	629	717	658	642
Geography	218	212	172	202	223	234	310	292	319
History and philosophy of science	10	14	9	10	10	11	23	16	19
Linguistics	72	81	71	93	91	81	104	98	101
Political science	2,504	2,389	2,380	2,496	2,469	2,530	2,541	2,698	2,676
Sociology	484	408	483	365	428	426	530	486	577
Sociology/anthropology	53	57	59	84	79	89	98	119	75
Social sciences, n.e.c.	851	914	866	852	801	825	820	700	701
Total, health fields	2,836	2,810	2,880	3,024	3,078	3,188	3,506	3,271	4,639
Dentistry	13	7	13	14	9	22	25	14	28
Neurology	2	1	1	2	1	3	12	11	11
Nursing	1,658	1,696	1,835	1,850	1,798	1,773	1,920	1,599	2,791
Pharmaceutical sciences	117	104	114	122	90	104	135	127	157
Preventive medicine/community health	380	355	441	317	409	485	631	683	760
Speech pathology/audiology	332	318	345	348	285	306	295	285	341
Veterinary sciences	101	124	113	107	118	129	117	170	149
Clinical medicine, n.e.c.	65	51	37	56	49	51	53	38	35
Health related, n.e.c.	168	154	181	208	319	316	318	344	367

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table C-1. Science and engineering graduate students in doctorate-granting institutions, by enrollment status and field: 1975-91**

Page 1 of 2

Year	Total, all surveyed fields	Sciences								
		Sciences, total	Physical sciences	Earth, atmos- pheric, and ocean sciences	Mathe- matical sciences	Computer sciences	Agri- cultural sciences	Biological sciences	Psychology	Social sciences
Total enrollment										
1975 .....	291,632	203,634	24,906	11,060	14,668	7,365	10,153	41,667	27,822	65,993
1976 .....	295,138	206,740	25,190	11,845	14,960	7,563	10,686	42,598	29,002	64,896
1977 .....	302,277	207,844	25,180	12,403	14,053	7,829	11,033	43,898	28,860	64,588
1978 .....	298,788	203,480	24,714	12,243	13,153	8,329	11,145	42,976	27,759	63,161
1979 .....	311,527	210,872	25,042	12,624	13,230	9,680	11,385	42,885	28,695	67,331
1980 .....	321,188	215,938	25,387	12,788	13,607	11,350	11,682	42,569	29,844	68,711
1981 .....	327,904	216,861	25,793	13,115	14,016	13,149	11,479	41,853	29,763	67,693
1982 .....	334,570	220,015	25,511	13,604	14,760	15,583	11,704	41,705	29,884	66,064
1983 .....	341,360	219,734	27,747	14,327	14,846	18,306	11,644	41,330	29,925	61,609
1984 .....	344,655	219,837	28,410	14,329	15,029	20,366	11,446	41,671	29,946	58,640
1985 .....	353,696	225,497	29,312	14,263	15,218	23,823	10,799	42,201	30,385	59,496
1986 .....	364,234	229,299	30,543	14,036	15,616	25,176	10,779	43,076	30,519	59,554
1987 .....	368,358	232,220	30,967	13,368	16,122	26,083	10,430	43,341	31,009	60,900
1988 .....	373,909	236,615	31,212	12,909	16,757	26,711	10,396	44,353	32,387	61,890
1989 .....	379,521	240,883	31,806	12,702	16,804	26,481	10,443	45,441	33,392	63,814
1990 .....	384,911	245,251	31,851	12,840	17,113	27,547	10,539	45,640	34,244	65,477
1991 .....	411,296	255,631	32,938	13,224	17,526	27,693	10,747	48,093	36,358	69,052
Full-time										
1975 .....	206,512	152,955	21,450	9,050	10,147	4,164	8,593	35,115	20,263	44,173
1976 .....	209,856	156,175	21,743	9,735	10,374	4,449	9,123	35,887	22,019	42,845
1977 .....	211,822	156,308	21,868	10,065	9,862	4,258	9,382	36,382	21,715	42,776
1978 .....	208,636	152,041	21,495	9,997	9,294	4,426	9,325	35,842	20,663	40,999
1979 .....	215,955	155,666	21,844	10,186	9,147	5,130	9,456	35,856	21,196	42,851
1980 .....	221,912	158,394	22,252	10,315	9,358	5,900	9,681	35,713	22,083	43,092
1981 .....	225,910	159,535	22,612	10,543	9,686	6,472	9,745	35,348	22,172	42,957
1982 .....	229,114	159,991	23,339	10,918	10,176	7,911	9,599	35,091	21,866	41,091
1983 .....	235,166	162,474	24,502	11,516	10,314	9,276	9,510	34,987	22,122	40,247
1984 .....	236,554	162,331	25,147	11,284	10,609	10,108	9,424	35,442	21,572	38,745
1985 .....	240,386	165,264	25,938	10,890	11,145	12,374	8,815	35,479	21,291	39,332
1986 .....	249,098	169,693	27,069	10,888	11,723	13,389	8,937	36,363	21,897	39,429
1987 .....	253,187	171,976	27,652	10,097	12,341	13,639	8,691	36,959	22,375	40,222
1988 .....	258,318	175,129	27,778	9,844	12,800	13,695	8,674	37,993	23,314	41,031
1989 .....	265,188	179,633	28,428	9,721	13,004	14,063	8,613	39,133	24,240	42,431
1990 .....	268,864	182,634	28,344	9,830	13,154	14,689	8,643	38,901	24,655	44,418
1991 .....	286,756	190,559	29,364	9,880	13,525	14,583	8,793	41,282	26,052	47,080
Part-time										
1975 .....	85,120	50,679	3,456	2,010	4,521	3,201	1,560	6,552	7,559	21,820
1976 .....	85,282	50,565	3,447	2,110	4,586	3,114	1,563	6,711	6,983	22,051
1977 .....	90,455	51,536	3,312	2,338	4,191	3,571	1,651	7,516	7,145	21,812
1978 .....	90,152	51,439	3,219	2,246	3,859	3,903	1,820	7,134	7,096	22,162
1979 .....	95,572	55,206	3,198	2,438	4,083	4,550	1,929	7,029	7,499	24,480
1980 .....	99,276	57,544	3,135	2,473	4,249	5,450	2,001	6,856	7,761	25,619
1981 .....	101,994	57,326	3,181	2,572	4,330	6,677	1,734	6,505	7,591	24,736
1982 .....	105,456	60,024	3,172	2,886	4,584	7,672	2,105	6,614	8,018	24,973
1983 .....	106,194	57,260	3,245	2,811	4,532	9,030	2,134	6,343	7,803	21,362
1984 .....	108,101	57,506	3,263	3,045	4,420	10,258	2,022	6,229	8,374	19,895
1985 .....	113,310	60,233	3,374	3,373	4,073	11,449	1,984	6,722	9,094	20,164
1986 .....	115,136	59,606	3,474	3,150	3,893	11,787	1,842	6,713	8,622	20,125
1987 .....	115,171	60,244	3,315	3,271	3,781	12,444	1,739	6,382	8,634	20,678
1988 .....	115,591	61,486	3,434	3,065	3,957	13,016	1,722	6,360	9,073	20,859
1989 .....	114,333	61,250	3,378	2,981	3,800	12,418	1,830	6,308	9,152	21,383
1990 .....	116,047	62,617	3,507	3,010	3,959	12,858	1,896	6,739	9,589	21,059
1991 .....	124,540	65,072	3,574	3,344	4,001	13,110	1,954	6,811	10,306	21,972

See explanatory information, if any, and SOURCE(S) at end of table.

**Table C-1. Science and engineering graduate students in doctorate-granting institutions, by enrollment status and field: 1975-91**

Page 2 of 2

Year	Engineering									Health fields
	Engineering, total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical & materials engineering	Other engineering	
	Total enrollment									
1975 .....	65,184	1,636	5,236	11,924	15,808	11,135	8,167	2,313	8,965	22,814
1976 .....	63,463	1,449	5,466	11,332	15,409	10,180	7,935	2,333	9,359	24,935
1977 .....	64,682	1,496	5,456	11,503	16,538	9,834	8,198	2,491	9,166	29,751
1978 .....	63,815	1,450	5,611	11,565	16,379	9,967	8,122	2,487	9,234	31,493
1979 .....	67,056	1,476	5,870	11,979	16,807	10,114	8,602	2,656	9,552	33,599
1980 .....	69,287	1,730	6,283	12,156	18,031	8,934	9,155	2,839	10,159	35,963
1981 .....	73,667	1,876	6,782	12,501	18,820	8,959	9,913	3,047	11,366	37,376
1982 .....	77,497	1,933	7,509	13,169	20,492	8,779	10,767	3,030	11,818	37,058
1983 .....	84,483	2,273	8,076	14,036	23,448	8,546	12,089	3,338	12,677	37,143
1984 .....	86,236	2,308	7,928	14,371	24,491	8,655	12,966	3,572	11,945	38,582
1985 .....	89,431	2,506	7,767	14,089	26,273	9,847	13,246	3,823	11,880	38,768
1986 .....	94,841	2,771	7,617	14,102	27,731	10,836	14,580	4,077	13,127	40,094
1987 .....	96,214	2,980	7,695	13,625	28,903	11,454	15,064	4,244	12,249	39,924
1988 .....	96,123	3,166	7,243	13,896	29,655	10,701	15,024	4,227	12,191	41,171
1989 .....	96,382	3,387	7,012	13,927	30,107	10,223	14,960	4,469	12,297	42,256
1990 .....	98,355	3,775	7,197	14,336	30,205	10,119	15,102	4,783	12,838	41,305
1991 .....	105,092	3,974	7,700	15,985	31,780	11,773	16,620	4,995	12,265	50,573
	Full-time									
1975 .....	37,166	1,225	3,718	7,196	8,219	4,064	4,879	1,780	6,085	16,391
1976 .....	36,311	1,153	3,988	6,887	8,092	3,489	4,874	1,853	5,975	17,370
1977 .....	36,443	1,178	4,150	6,921	8,353	3,228	4,797	1,941	5,875	19,071
1978 .....	36,721	1,135	4,226	7,123	8,334	3,140	4,868	1,961	5,934	19,874
1979 .....	39,064	1,151	4,513	7,396	8,857	3,626	5,346	2,120	6,055	21,225
1980 .....	41,561	1,324	4,792	7,740	9,693	3,568	5,730	2,236	6,478	21,957
1981 .....	44,422	1,480	5,311	8,416	10,156	3,429	6,337	2,436	6,857	21,953
1982 .....	48,324	1,519	5,994	9,068	11,277	3,586	7,128	2,453	7,299	20,799
1983 .....	52,294	1,825	6,397	9,533	12,854	3,130	8,178	2,686	7,691	20,398
1984 .....	53,592	1,840	6,258	9,853	13,461	3,271	8,511	2,863	7,535	20,631
1985 .....	54,462	1,980	6,045	9,518	14,358	3,342	8,683	3,075	7,461	20,660
1986 .....	58,532	2,138	6,093	9,704	15,732	3,704	9,587	3,340	8,234	20,873
1987 .....	60,043	2,355	6,197	9,380	16,457	4,045	9,955	3,409	8,245	21,168
1988 .....	61,266	2,517	5,900	9,629	17,012	4,176	10,186	3,441	8,405	21,923
1989 .....	62,363	2,742	5,739	9,643	17,597	4,492	10,185	3,687	8,278	23,192
1990 .....	63,378	2,946	5,811	9,793	17,756	4,476	10,337	3,898	8,361	22,852
1991 .....	68,925	3,247	6,247	10,836	19,181	5,422	11,371	4,034	8,587	27,272
	Part-time									
1975 .....	28,018	411	1,518	4,728	7,589	7,071	3,288	533	2,880	6,423
1976 .....	27,152	296	1,478	4,445	7,317	6,691	3,061	480	3,384	7,565
1977 .....	28,239	318	1,306	4,582	8,185	6,606	3,401	550	3,291	10,680
1978 .....	27,094	315	1,385	4,442	8,045	5,827	3,254	526	3,300	11,619
1979 .....	27,992	325	1,357	4,583	7,950	6,488	3,256	536	3,497	12,374
1980 .....	27,726	406	1,491	4,416	8,328	5,368	3,425	603	3,681	14,006
1981 .....	29,245	396	1,471	4,488	8,664	5,530	3,576	611	4,509	15,423
1982 .....	29,173	414	1,515	4,101	9,215	5,193	3,639	577	4,519	16,259
1983 .....	32,189	448	1,679	4,503	10,594	5,416	3,911	652	4,986	16,745
1984 .....	32,644	468	1,670	4,518	11,030	5,384	4,455	709	4,410	17,951
1985 .....	34,969	526	1,722	4,571	11,915	6,505	4,563	748	4,419	18,108
1986 .....	36,309	633	1,524	4,398	11,999	7,132	4,993	737	4,893	19,221
1987 .....	36,171	625	1,498	4,245	12,446	7,409	5,109	835	4,004	18,756
1988 .....	34,857	669	1,343	4,267	12,843	6,525	4,838	786	3,786	19,248
1989 .....	34,019	645	1,273	4,284	12,510	5,731	4,775	782	4,019	19,064
1990 .....	34,977	829	1,386	4,543	12,449	5,643	4,765	865	4,477	18,453
1991 .....	36,167	727	1,453	5,149	12,599	6,351	5,249	961	3,678	23,301

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table C-2. Science and engineering graduate students in doctorate-granting institutions, by sex and field: 1975-91

Page 1 of 2

Year	Total, all surveyed fields	Sciences								
		Sciences, total	Physical sciences	Earth, atmospheric, and ocean sciences	Mathematical sciences	Computer sciences	Agricultural sciences	Biological sciences	Psychology	Social sciences
Total enrollment										
1975	291,632	203,634	24,906	11,060	14,668	7,385	10,153	41,867	27,822	65,993
1976	295,138	206,740	25,190	11,845	14,960	7,563	10,686	42,598	29,002	64,896
1977	302,277	207,844	25,180	12,403	14,053	7,829	11,033	43,898	28,860	64,588
1978	298,788	203,480	24,714	12,243	13,153	8,329	11,145	42,976	27,759	63,161
1979	311,527	210,872	25,042	12,624	13,230	9,680	11,385	42,885	28,695	67,331
1980	321,188	215,938	25,387	12,788	13,607	11,350	11,682	42,569	29,844	68,711
1981	327,904	216,861	25,793	13,115	14,016	13,149	11,479	41,853	29,763	67,693
1982	334,570	220,015	26,511	13,804	14,760	15,583	11,704	41,705	29,884	66,064
1983	341,360	219,734	27,747	14,327	14,846	18,306	11,644	41,330	29,925	61,609
1984	344,655	219,837	28,410	14,329	15,029	20,386	11,446	41,671	29,946	58,640
1985	353,696	225,497	29,312	14,263	15,218	23,823	10,799	42,201	30,385	59,496
1986	364,234	229,299	30,543	14,036	15,616	25,176	10,779	43,076	30,519	59,554
1987	368,358	232,220	30,967	13,368	16,122	26,083	10,430	43,341	31,009	60,900
1988	373,909	236,615	31,212	12,909	16,757	26,711	10,396	44,353	32,387	61,890
1989	379,521	240,883	31,806	12,702	16,804	26,481	10,443	45,441	33,392	63,814
1990	384,911	245,251	31,851	12,840	17,113	27,547	10,539	45,640	34,244	65,477
1991	411,296	255,631	32,938	13,224	17,526	27,693	10,747	48,093	36,358	69,052
Men										
1975	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977	218,038	146,732	21,524	10,317	10,651	6,510	9,027	29,137	15,827	43,739
1978 1/	210,985	141,006	20,933	9,935	9,953	6,818	8,860	27,922	14,568	42,017
1979	213,861	142,267	21,010	9,963	9,915	7,793	8,850	27,028	14,209	43,499
1980	216,665	142,825	21,172	9,879	10,154	8,880	8,943	26,334	14,284	43,179
1981	217,790	140,964	21,237	9,982	10,278	9,910	8,859	25,349	13,670	41,679
1982	220,119	141,114	21,589	10,378	10,652	11,448	8,808	24,576	13,187	40,476
1983	224,721	140,070	22,386	10,710	10,625	13,325	8,699	24,089	12,964	37,292
1984	226,340	140,295	22,736	10,772	10,808	15,065	8,495	24,218	12,610	35,591
1985	231,918	143,086	23,318	10,636	10,794	17,934	7,998	24,299	12,255	35,852
1986	238,217	144,985	24,199	10,376	11,036	19,252	7,994	24,529	11,944	35,655
1987	240,681	145,796	24,374	9,878	11,395	19,867	7,661	24,606	11,836	36,179
1988	240,579	146,253	24,254	9,409	11,868	20,215	7,530	24,794	11,965	36,218
1989	241,876	147,342	24,519	9,152	11,746	20,285	7,520	25,027	12,085	37,008
1990	244,032	148,188	24,434	9,120	11,902	21,264	7,424	24,867	11,837	37,340
1991	255,281	152,627	24,921	9,238	12,107	21,358	7,405	25,999	12,364	39,235
Women										
1975	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977	84,239	61,112	3,656	2,086	3,402	1,319	2,006	14,761	13,033	20,849
1978 1/	88,986	63,004	3,781	2,308	3,241	1,511	2,228	15,194	13,335	21,406
1979	97,666	68,605	4,032	2,661	3,315	1,887	2,535	15,857	14,486	23,832
1980	104,523	73,113	4,215	2,909	3,453	2,470	2,739	16,235	15,560	25,532
1981	110,114	75,897	4,556	3,133	3,738	3,239	2,620	16,504	16,093	26,014
1982	114,451	78,901	4,922	3,426	4,108	4,135	2,896	17,129	16,697	25,588
1983	116,639	79,664	5,381	3,617	4,221	4,981	2,945	17,241	16,961	24,317
1984	118,315	79,542	5,674	3,557	4,221	5,301	2,951	17,453	17,336	23,049
1985	121,778	82,411	5,994	3,627	4,424	5,889	2,801	17,902	18,130	23,644
1986	126,017	84,314	6,344	3,660	4,580	5,924	2,785	18,547	18,575	23,899
1987	127,677	86,424	6,593	3,490	4,727	6,216	2,769	18,735	19,173	24,721
1988	133,330	90,362	6,958	3,500	4,889	6,496	2,866	19,559	20,422	25,672
1989	137,645	93,541	7,287	3,550	5,058	6,196	2,923	20,414	21,307	26,806
1990	140,879	97,063	7,417	3,720	5,211	6,283	3,115	20,773	22,407	28,137
1991	156,015	103,004	8,017	3,986	5,419	6,335	3,342	22,094	23,994	29,817

See explanatory information, if any, and SOURCE(S) at end of table.

Table C-2. Science and engineering graduate students in doctorate-granting institutions, by sex and field: 1975-91

Page 2 of 2

Year	Engineering									Health fields
	Engineering, total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical & materials engineering	Other engineering	
Total enrollment										
1975 .....	65,184	1,636	5,236	11,924	15,808	11,135	8,167	2,313	8,965	22,814
1976 .....	63,463	1,449	5,466	11,332	15,409	10,180	7,935	2,333	9,359	24,935
1977 .....	64,682	1,496	5,456	11,503	16,538	9,834	8,198	2,491	9,166	29,751
1978 .....	63,815	1,450	5,611	11,565	16,379	8,967	8,122	2,487	9,234	31,483
1979 .....	67,056	1,476	5,870	11,979	16,807	10,114	8,602	2,656	9,552	33,599
1980 .....	69,287	1,730	6,283	12,156	18,031	8,934	9,155	2,839	10,159	35,963
1981 .....	73,667	1,876	6,782	12,904	18,820	8,959	9,913	3,047	11,366	37,376
1982 .....	77,497	1,933	7,509	13,169	20,492	8,779	10,767	3,030	11,818	37,058
1983 .....	84,483	2,273	8,076	14,036	23,448	8,546	12,089	3,338	12,677	37,143
1984 .....	86,236	2,308	7,928	14,371	24,491	8,655	12,966	3,572	11,945	38,582
1985 .....	89,431	2,506	7,767	14,089	26,273	9,847	13,246	3,823	11,680	38,768
1986 .....	94,841	2,771	7,617	14,102	27,731	10,836	14,580	4,077	13,127	40,094
1987 .....	96,214	2,980	7,695	13,625	28,903	11,454	15,064	4,244	12,249	39,924
1988 .....	96,123	3,186	7,243	13,896	29,655	10,701	15,024	4,227	12,191	41,171
1989 .....	96,382	3,387	7,012	13,927	30,107	10,223	14,960	4,469	12,297	42,256
1990 .....	98,355	3,775	7,197	14,336	30,205	10,119	15,102	4,783	12,838	41,305
1991 .....	105,092	3,974	7,700	15,985	31,780	11,773	16,620	4,995	12,265	50,573
Men										
1975 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977 .....	61,228	1,463	5,075	10,765	15,852	9,131	7,941	2,318	8,683	10,078
1978 1/ .....	59,963	1,411	5,127	10,861	15,704	8,147	7,798	2,276	8,639	10,016
1979 .....	61,678	1,427	5,248	10,799	15,907	8,946	8,167	2,383	8,801	9,916
1980 .....	63,335	1,656	5,585	10,908	17,084	7,679	8,651	2,542	9,230	10,505
1981 .....	66,512	1,809	5,983	11,440	17,621	7,531	9,314	2,671	10,143	10,314
1982 .....	69,357	1,823	6,600	11,511	19,034	7,274	10,085	2,622	10,408	9,648
1983 .....	75,399	2,151	7,023	12,277	21,551	7,108	11,325	2,903	11,061	9,252
1984 .....	76,676	2,177	6,924	12,449	22,481	7,136	12,062	3,114	10,333	9,369
1985 .....	79,170	2,344	6,728	12,066	24,040	8,177	12,304	3,248	10,263	9,662
1986 .....	83,346	2,572	6,551	12,077	25,065	8,850	13,509	3,429	11,293	9,886
1987 .....	84,291	2,759	6,527	11,686	26,095	9,330	13,902	3,535	10,457	10,594
1988 .....	83,874	2,962	6,142	11,777	26,650	8,698	13,728	3,490	10,427	10,452
1989 .....	83,750	3,151	5,975	11,671	26,964	8,234	13,678	3,686	10,391	10,784
1990 .....	84,949	3,491	6,049	11,914	26,921	8,157	13,804	3,917	10,696	10,895
1991 .....	90,612	3,657	6,413	13,109	28,334	9,626	15,205	4,041	10,227	12,042
Women										
1975 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977 .....	3,454	33	381	738	686	703	257	173	483	19,673
1978 1/ .....	4,306	39	484	1,059	774	820	324	211	595	21,676
1979 .....	5,378	49	622	1,180	900	1,168	435	273	751	23,683
1980 .....	5,952	74	698	1,248	947	1,255	504	297	929	25,458
1981 .....	7,155	67	799	1,464	1,199	1,428	599	376	1,223	27,062
1982 .....	8,140	110	909	1,658	1,458	1,505	682	408	1,410	27,410
1983 .....	9,084	122	1,053	1,759	1,897	1,438	764	435	1,616	27,891
1984 .....	9,560	131	1,004	1,922	2,010	1,519	904	458	1,612	29,213
1985 .....	10,261	162	1,039	2,023	2,233	1,670	942	575	1,617	29,106
1986 .....	11,495	199	1,066	2,025	2,666	1,986	1,071	648	1,834	30,208
1987 .....	11,923	221	1,168	1,939	2,808	2,124	1,162	709	1,792	29,330
1988 .....	12,249	224	1,101	2,119	3,005	2,003	1,296	737	1,784	30,719
1989 .....	12,632	236	1,037	2,258	3,143	1,989	1,282	783	1,906	31,472
1990 .....	13,406	284	1,148	2,422	3,264	1,962	1,298	866	2,142	30,410
1991 .....	14,480	317	1,287	2,876	3,446	2,147	1,415	954	2,038	38,531

1/ Distribution by sex data were not requested in 1978; totals represent estimates based on 1977 and 1979 data.

KEY: NA = Not available

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



Table C-3. Full-time science and engineering graduate students in doctorate-granting institutions, by sex and field: 1975-91

Page 1 of 2

Year	Total, all surveyed fields	Sciences								
		Sciences, total	Physical sciences	Earth, atmos- pheric, and ocean sciences	Mathe- matical sciences	Computer sciences	Agri- cultural sciences	Biological sciences	Psychology	Social sciences
Total enrollment										
1975 .....	206,512	152,955	21,450	9,050	10,147	4,164	8,593	35,115	20,263	44,173
1976 .....	209,856	156,175	21,743	9,735	10,374	4,449	9,123	35,887	22,019	42,845
1977 .....	211,822	156,308	21,868	10,065	9,862	4,258	9,382	36,382	21,715	42,776
1978 .....	208,636	152,041	21,495	9,997	9,294	4,426	9,325	35,842	20,663	40,999
1979 .....	215,955	155,666	21,844	10,186	9,147	5,130	9,456	35,856	21,196	42,851
1980 .....	221,912	158,394	22,252	10,315	9,358	5,900	9,681	35,713	22,083	43,092
1981 .....	225,910	159,535	22,612	10,543	9,686	6,472	9,745	35,348	22,172	42,957
1982 .....	229,114	159,991	23,339	10,918	10,176	7,911	9,599	35,091	21,866	41,091
1983 .....	235,166	162,474	24,502	11,516	10,314	9,276	9,510	34,987	22,122	40,247
1984 .....	236,554	162,331	25,147	11,284	10,609	10,108	9,424	35,442	21,572	38,745
1985 .....	240,386	165,264	25,938	10,890	11,145	12,374	8,815	35,479	21,291	39,332
1986 .....	249,098	169,693	27,069	10,886	11,723	13,389	8,937	36,363	21,897	39,429
1987 .....	253,187	171,976	27,652	10,097	12,341	13,639	8,691	36,959	22,375	40,222
1988 .....	258,318	175,129	27,778	9,844	12,800	13,695	8,674	37,993	23,314	41,031
1989 .....	265,188	179,633	28,428	9,721	13,004	14,063	8,613	39,133	24,240	42,431
1990 .....	288,864	182,634	28,344	9,830	13,154	14,689	8,643	38,901	24,655	44,418
1991 .....	286,756	190,559	29,364	9,880	13,525	14,583	8,793	41,282	26,052	47,080
Men										
1975 .....	157,603	114,422	18,769	7,826	8,026	3,573	7,451	25,060	11,926	31,791
1976 .....	154,993	113,586	18,802	8,173	8,095	3,755	7,680	24,812	12,576	29,693
1977 .....	152,687	111,308	18,803	8,333	7,725	3,573	7,634	24,492	11,925	28,823
1978 1/ .....	148,116	106,701	18,346	8,089	7,274	3,675	7,364	23,673	10,960	27,320
1979 .....	149,826	106,958	18,501	8,034	7,149	4,213	7,322	23,042	10,783	27,914
1980 .....	151,623	106,521	18,722	7,960	7,221	4,668	7,367	22,556	10,732	27,295
1981 .....	152,782	105,887	18,797	8,057	7,325	5,003	7,471	22,018	10,322	26,894
1982 .....	154,689	104,985	19,134	8,228	7,625	5,942	7,195	21,246	9,823	25,792
1983 .....	159,382	106,233	19,867	8,661	7,649	7,066	7,104	21,016	9,830	25,040
1984 .....	160,130	106,127	20,254	8,553	7,875	7,734	6,956	21,127	9,270	24,358
1985 .....	162,583	107,805	20,745	8,167	8,187	9,747	6,532	20,991	8,862	24,574
1986 .....	168,067	109,910	21,534	8,064	8,570	10,533	6,650	21,215	8,815	24,529
1987 .....	170,475	110,525	21,853	7,500	9,035	10,787	6,413	21,410	8,772	24,755
1988 .....	171,446	110,631	21,646	7,203	9,350	10,801	6,316	21,804	8,677	24,834
1989 .....	174,284	112,413	21,983	7,056	9,309	11,253	6,224	22,168	8,877	25,543
1990 .....	175,262	112,769	21,841	7,041	9,359	11,724	6,113	21,750	8,791	26,150
1991 .....	183,692	115,983	22,326	6,907	9,580	11,574	6,078	22,849	9,050	27,619
Women										
1975 .....	48,909	38,533	2,681	1,224	2,121	591	1,142	10,055	8,337	12,382
1976 .....	54,863	42,589	2,941	1,562	2,279	694	1,443	11,075	9,443	13,152
1977 .....	59,135	45,000	3,065	1,732	2,137	685	1,748	11,890	9,790	13,953
1978 1/ .....	61,264	45,640	3,149	1,908	2,022	751	1,895	12,283	9,745	13,887
1979 .....	66,129	48,708	3,343	2,152	1,998	917	2,134	12,814	10,413	14,937
1980 .....	70,289	51,873	3,537	2,355	2,137	1,232	2,314	13,157	11,351	15,797
1981 .....	73,128	53,648	3,815	2,486	2,361	1,469	2,274	13,330	11,850	16,063
1982 .....	74,425	55,006	4,205	2,690	2,551	1,969	2,404	13,845	12,043	15,299
1983 .....	75,784	56,241	4,635	2,855	2,665	2,210	2,406	13,971	12,292	15,207
1984 .....	76,424	56,204	4,893	2,731	2,734	2,374	2,468	14,315	12,302	14,387
1985 .....	77,803	57,459	5,193	2,723	2,958	2,627	2,283	14,488	12,429	14,758
1986 .....	81,031	59,783	5,535	2,822	3,153	2,856	2,287	15,148	13,082	14,900
1987 .....	82,712	61,451	5,799	2,597	3,306	2,852	2,278	15,549	13,603	15,467
1988 .....	86,872	64,498	6,132	2,641	3,450	2,894	2,358	16,189	14,637	16,197
1989 .....	90,904	67,220	6,445	2,665	3,695	2,810	2,389	16,965	15,363	16,888
1990 .....	93,602	69,865	6,503	2,789	3,795	2,965	2,530	17,151	15,864	18,268
1991 .....	103,064	74,576	7,038	2,973	3,945	3,009	2,715	18,433	17,002	19,461

See explanatory information, if any, and SOURCE(S) at end of table.

**Table C-3. Full-time science and engineering graduate students in doctorate-granting institutions, by sex and field: 1975-91**

Page 2 of 2

Year	Engineering									Health fields
	Engineering, total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical & materials engineering	Other engineering	
Total enrollment										
1975 .....	37,166	1,225	3,718	7,196	8,219	4,064	4,879	1,780	6,085	16,391
1976 .....	36,311	1,153	3,988	6,887	8,092	3,489	4,874	1,853	5,975	17,370
1977 .....	36,443	1,178	4,150	6,921	8,353	3,228	4,797	1,941	5,875	19,071
1978 .....	36,721	1,135	4,226	7,123	8,334	3,140	4,868	1,961	5,934	19,874
1979 .....	39,064	1,151	4,513	7,396	8,857	3,628	5,346	2,120	6,055	21,225
1980 .....	41,561	1,324	4,792	7,740	9,693	3,568	5,730	2,236	6,478	21,957
1981 .....	44,422	1,480	5,311	8,416	10,156	3,429	6,337	2,436	6,857	21,953
1982 .....	48,324	1,519	5,994	9,088	11,277	3,586	7,128	2,453	7,299	20,799
1983 .....	52,294	1,825	6,397	9,533	12,854	3,130	8,178	2,688	7,691	20,398
1984 .....	53,592	1,840	6,258	9,853	13,461	3,271	8,511	2,863	7,535	20,631
1985 .....	54,462	1,980	6,045	9,518	14,358	3,342	8,683	3,075	7,461	20,660
1986 .....	58,532	2,138	6,093	9,704	15,732	3,704	9,587	3,340	8,234	20,873
1987 .....	60,043	2,355	6,197	9,380	16,457	4,045	9,955	3,409	8,245	21,168
1988 .....	61,266	2,517	5,900	9,629	17,012	4,176	10,185	3,441	8,405	21,923
1989 .....	62,363	2,742	5,739	9,643	17,597	4,492	10,185	3,687	8,278	23,192
1990 .....	63,378	2,946	5,811	9,793	17,756	4,476	10,337	3,898	8,361	22,852
1991 .....	68,925	3,247	6,247	10,836	19,181	5,422	11,371	4,034	8,587	27,272
Men										
1975 .....	35,296	1,205	3,552	6,762	7,991	3,586	4,767	1,681	5,752	7,885
1976 .....	34,322	1,130	3,746	6,395	7,796	3,111	4,754	1,746	5,644	7,085
1977 .....	34,234	1,151	3,864	6,405	7,976	2,855	4,660	1,801	5,522	7,145
1978 1/ .....	34,291	1,105	3,874	6,667	7,935	2,710	4,688	1,794	5,510	7,124
1979 .....	35,721	1,115	4,060	6,537	8,407	3,061	5,091	1,908	5,542	7,147
1980 .....	37,794	1,270	4,304	6,863	9,149	2,924	5,416	2,006	5,862	7,308
1981 .....	39,942	1,429	4,749	7,341	9,464	2,759	5,994	2,152	6,054	6,953
1982 .....	43,236	1,446	5,301	7,866	10,480	2,847	6,704	2,148	6,444	6,468
1983 .....	46,895	1,745	5,576	8,285	11,937	2,543	7,708	2,366	6,735	6,254
1984 .....	47,740	1,754	5,495	8,458	12,355	2,668	7,963	2,511	6,546	6,263
1985 .....	48,379	1,854	5,258	8,071	13,204	2,730	8,137	2,640	6,485	6,399
1986 .....	51,778	1,990	5,278	8,266	14,333	2,984	8,972	2,823	7,132	6,379
1987 .....	52,994	2,190	5,296	8,024	14,976	3,329	9,253	2,843	7,083	6,956
1988 .....	53,892	2,351	5,087	8,139	15,403	3,460	9,375	2,865	7,212	6,923
1989 .....	54,466	2,562	4,931	8,049	15,858	3,630	9,351	3,055	7,030	7,405
1990 .....	54,998	2,748	4,905	8,079	15,889	3,619	9,525	3,211	7,022	7,495
1991 .....	59,514	3,001	5,231	8,873	17,112	4,420	10,443	3,294	7,140	8,195
Women										
1975 .....	1,870	20	166	434	228	478	112	99	333	8,506
1976 .....	1,989	23	242	492	296	378	120	107	331	10,285
1977 .....	2,209	27	286	516	377	373	137	140	353	11,926
1978 1/ .....	2,766	30	352	792	399	422	160	167	424	12,858
1979 .....	3,343	36	453	859	450	565	255	212	513	14,078
1980 .....	3,767	54	488	877	544	644	314	230	616	14,649
1981 .....	4,480	51	562	1,075	692	670	343	284	803	15,000
1982 .....	5,088	73	693	1,202	797	739	424	305	855	14,331
1983 .....	5,399	80	821	1,248	917	587	470	320	956	14,144
1984 .....	5,852	86	773	1,395	1,106	603	548	352	989	14,368
1985 .....	6,083	126	787	1,447	1,154	612	546	435	976	14,261
1986 .....	6,754	148	815	1,438	1,399	720	615	517	1,102	14,494
1987 .....	7,049	165	901	1,356	1,481	716	702	566	1,162	14,212
1988 .....	7,374	166	813	1,490	1,609	716	811	576	1,193	15,000
1989 .....	7,897	180	808	1,594	1,739	862	834	632	1,248	15,787
1990 .....	8,380	198	906	1,714	1,867	857	812	687	1,339	15,357
1991 .....	9,411	246	1,016	1,963	2,069	1,002	928	740	1,447	19,077

1/ Distribution by sex data were not requested in 1978; totals represent estimates based on 1977 and 1979 data.

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table C-4. Full-time science and engineering graduate students in doctorate-granting institutions, by citizenship and field: 1975-91

Page 1 of 2

Year	Total, all surveyed fields	Sciences								
		Sciences, total	Physical sciences	Earth, atmospheric, and ocean sciences	Mathematical sciences	Computer sciences	Agricultural sciences	Biological sciences	Psychology	Social sciences
Total enrollment										
1975	206,512	152,955	21,450	9,050	10,147	4,184	8,593	35,115	20,263	44,173
1976	209,856	156,175	21,743	9,735	10,374	4,449	9,123	35,887	22,019	42,845
1977	211,822	156,308	21,868	10,065	9,862	4,258	9,382	36,382	21,715	42,776
1978	208,636	152,041	21,495	9,997	9,294	4,426	9,325	35,842	20,663	40,999
1979	215,955	155,666	21,844	10,186	9,147	5,130	9,456	35,856	21,196	42,851
1980	221,912	158,394	22,252	10,315	9,358	5,900	9,681	35,713	22,083	43,092
1981	225,910	159,535	22,612	10,543	9,686	6,472	9,745	35,348	22,172	42,957
1982	229,114	159,991	23,339	10,918	10,176	7,911	9,599	35,091	21,866	41,091
1983	235,166	162,474	24,502	11,516	10,314	9,276	9,510	34,987	22,122	40,247
1984	236,554	162,331	25,147	11,284	10,609	10,108	9,424	35,442	21,572	38,745
1985	240,386	165,264	25,938	10,890	11,145	12,374	8,815	35,479	21,291	39,332
1986	249,098	169,693	27,069	10,886	11,723	13,389	8,937	36,363	21,897	39,429
1987	253,187	171,976	27,652	10,097	12,341	13,639	8,691	36,959	22,375	40,222
1988	258,318	175,129	27,778	9,844	12,800	13,695	8,674	37,993	23,314	41,031
1989	265,188	179,633	28,428	9,721	13,004	14,063	8,613	39,133	24,240	42,431
1990	268,864	182,634	28,344	9,830	13,154	14,889	8,643	38,901	24,655	44,418
1991	286,756	190,559	29,364	9,880	13,525	14,583	8,793	41,282	26,052	47,080
U.S. citizens										
1975 1/	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976 1/	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977 1/	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1978 1/	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979 1/	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1980	173,594	129,467	16,665	8,977	6,207	4,030	7,492	31,392	21,018	33,686
1981	173,640	128,448	16,531	9,076	6,160	4,266	7,433	30,729	21,315	32,938
1982	174,122	127,879	17,047	9,313	6,456	5,139	7,290	30,249	20,931	31,454
1983	175,867	127,548	17,458	9,858	6,234	5,763	7,107	29,689	21,187	30,252
1984	175,833	126,318	17,719	9,733	6,262	6,109	7,090	29,868	20,648	28,889
1985	174,831	125,596	17,685	9,255	6,500	7,481	6,498	29,327	20,259	28,591
1986	176,819	126,293	17,778	9,018	6,774	7,943	6,415	29,379	20,867	28,119
1987	177,368	126,101	17,856	8,157	7,050	7,929	6,113	29,107	21,308	28,581
1988	177,593	126,130	17,529	7,702	7,213	7,665	6,080	29,145	22,110	28,686
1989	181,330	128,287	17,555	7,425	7,203	7,704	6,046	29,284	23,016	30,054
1990	182,213	129,632	17,129	7,451	7,478	7,718	5,877	28,673	23,325	31,981
1991	194,839	135,314	17,734	7,376	7,857	7,493	6,018	29,921	24,588	34,327
Non-U.S. citizens										
1975 1/	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976 1/	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977 1/	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1978 1/	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979 1/	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1980	48,318	28,927	5,587	1,338	3,151	1,870	2,189	4,321	1,065	9,406
1981	52,270	31,087	6,081	1,467	3,526	2,206	2,312	4,619	857	10,019
1982	54,992	32,112	6,292	1,605	3,720	2,772	2,309	4,842	935	9,637
1983	59,299	34,926	7,044	1,658	4,080	3,513	2,403	5,298	935	9,995
1984	60,721	36,013	7,428	1,551	4,347	3,999	2,334	5,574	924	9,856
1985	65,555	39,668	8,253	1,635	4,645	4,893	2,317	6,152	1,032	10,741
1986	72,279	43,400	9,291	1,868	4,949	5,446	2,522	6,984	1,030	11,310
1987	75,819	45,875	9,796	1,940	5,291	5,710	2,578	7,852	1,067	11,641
1988	80,725	48,999	10,249	2,142	5,587	6,030	2,594	8,848	1,204	12,345
1989	83,858	51,346	10,873	2,296	5,801	6,359	2,567	9,849	1,224	12,377
1990	86,651	53,002	11,215	2,379	5,676	6,971	2,766	10,228	1,330	12,437
1991	91,917	55,245	11,630	2,504	5,668	7,090	2,775	11,361	1,464	12,753

See explanatory information, if any, and SOURCE(S) at end of table.

**Table C-4. Full-time science and engineering graduate students in doctorate-granting institutions, by citizenship and field: 1975-91**

Page 2 of 2

Engineering											Health fields
Year	Engi- neering, total	Aerospace engi- neering	Chemical engi- neering	Civil engi- neering	Electrical engi- neering	Industrial engi- neering	Mechanical engi- neering	Metallur- gical & materials engi- neering	Other engi- neering		
Total enrollment											
1975 .....	37,166	1,225	3,718	7,196	8,219	4,064	4,879	1,780	8,085	16,391	
1976 .....	36,311	1,153	3,988	6,887	8,092	3,489	4,874	1,853	5,975	17,370	
1977 .....	36,443	1,178	4,150	6,921	8,353	3,228	4,797	1,941	5,875	19,071	
1978 .....	36,721	1,135	4,226	7,123	8,334	3,140	4,868	1,961	5,934	19,874	
1979 .....	35,064	1,151	4,513	7,396	8,857	3,626	5,346	2,120	6,055	21,225	
1980 .....	41,561	1,324	4,792	7,740	9,693	3,568	5,730	2,236	6,478	21,957	
1981 .....	44,422	1,480	5,311	8,416	10,156	3,429	6,337	2,436	6,857	21,953	
1982 .....	48,324	1,519	5,994	9,068	11,277	3,586	7,128	2,453	7,299	20,799	
1983 .....	52,294	1,825	6,397	9,533	12,854	3,130	8,178	2,686	7,691	20,398	
1984 .....	53,592	1,840	6,258	9,853	13,461	3,271	8,511	2,863	7,535	20,631	
1985 .....	54,462	1,980	6,045	9,518	14,358	3,342	8,683	3,075	7,461	20,660	
1986 .....	58,532	2,138	6,093	9,704	15,732	3,704	9,587	3,340	8,234	20,873	
1987 .....	60,043	2,355	6,197	9,380	16,457	4,045	9,955	3,409	8,245	21,168	
1988 .....	61,268	2,517	5,900	9,629	17,012	4,176	10,186	3,441	8,405	21,923	
1989 .....	62,363	2,742	5,739	9,643	17,597	4,492	10,185	3,687	8,278	23,192	
1990 .....	63,378	2,946	5,811	9,793	17,756	4,476	10,337	3,898	8,361	22,852	
1991 .....	68,925	3,247	6,247	10,836	19,181	5,422	11,371	4,034	8,587	27,272	
U.S. citizens											
1975 1/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1976 1/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1977 1/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1978 1/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1979 1/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1980 .....	24,146	759	2,631	4,528	5,530	2,203	3,150	1,136	4,209	19,981	
1981 .....	25,320	882	2,953	4,919	5,542	1,928	3,328	1,330	4,438	19,872	
1982 .....	27,601	944	3,417	5,220	6,268	2,056	3,684	1,280	4,732	18,642	
1983 .....	30,185	1,078	3,910	5,379	7,191	1,829	4,247	1,520	5,011	18,154	
1984 .....	31,096	1,104	3,878	5,536	7,679	1,863	4,509	1,659	4,868	18,419	
1985 .....	31,025	1,249	3,616	5,123	7,943	1,795	4,778	1,797	4,724	18,210	
1986 .....	32,257	1,332	3,677	5,132	8,286	1,974	5,118	1,837	4,901	18,269	
1987 .....	32,777	1,547	3,634	4,915	8,643	2,077	5,401	1,812	4,748	18,490	
1988 .....	32,506	1,491	3,180	4,955	8,950	2,164	5,186	1,790	4,790	18,957	
1989 .....	33,060	1,743	2,862	4,891	9,350	2,335	5,506	1,869	4,504	19,983	
1990 .....	33,072	1,834	2,794	5,147	9,184	2,199	5,520	2,010	4,384	19,509	
1991 .....	35,972	2,126	2,923	5,783	9,691	2,678	5,979	2,070	4,722	23,553	
Non-U.S. citizens											
1975 1/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1976 1/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1977 1/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1978 1/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1979 1/ .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1980 .....	17,415	565	2,161	3,212	4,163	1,365	2,580	1,100	2,269	1,976	
1981 .....	19,102	598	2,358	3,497	4,614	1,501	3,009	1,106	2,419	2,081	
1982 .....	20,723	575	2,577	3,848	5,009	1,530	3,444	1,173	2,567	2,157	
1983 .....	22,129	747	2,487	4,154	5,663	1,301	3,931	1,166	2,680	2,244	
1984 .....	22,496	736	2,380	4,317	5,782	1,408	4,002	1,204	2,667	2,212	
1985 .....	23,437	731	2,429	4,395	6,415	1,547	3,905	1,278	2,737	2,450	
1986 .....	26,275	806	2,416	4,572	7,446	1,730	4,469	1,503	3,333	2,604	
1987 .....	27,266	808	2,563	4,465	7,814	1,968	4,554	1,597	3,497	2,678	
1988 .....	28,760	1,026	2,720	4,674	8,062	2,012	5,000	1,651	3,615	2,966	
1989 .....	29,303	999	2,877	4,752	8,247	2,157	4,679	1,818	3,774	3,209	
1990 .....	30,306	1,112	3,017	4,646	8,572	2,277	4,817	1,888	3,977	3,343	
1991 .....	32,953	1,121	3,324	5,053	9,490	2,744	5,392	1,964	3,865	3,719	

1/ Data on citizenship distribution were not requested before 1980.

KEY: NA = Not available

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table C-5. Part-time science and engineering graduate students in doctorate-granting institutions, by sex and field: 1975-91

Page 1 of 2

Year	Total, all surveyed fields	Sciences								
		Sciences, total	Physical sciences	Earth, atmos- pheric, and ocean sciences	Mathe- matical sciences	Computer sciences	Agri- cultural sciences	Biological sciences	Psychology	Social sciences
Total enrollment										
1975 .....	85,120	50,679	3,456	2,010	4,521	3,201	1,560	6,552	7,559	21,820
1976 .....	85,282	50,565	3,447	2,110	4,586	3,114	1,563	6,711	6,983	22,051
1977 .....	90,455	51,536	3,312	2,338	4,191	3,571	1,651	7,516	7,145	21,812
1978 .....	90,152	51,439	3,219	2,246	3,859	3,903	1,820	7,134	7,096	22,162
1979 .....	95,572	55,206	3,198	2,438	4,083	4,550	1,929	7,029	7,499	24,480
1980 .....	99,276	57,544	3,135	2,473	4,249	5,450	2,001	6,856	7,761	25,619
1981 .....	101,994	57,326	3,181	2,572	4,330	6,677	1,734	6,505	7,591	24,736
1982 .....	105,456	60,024	3,172	2,886	4,584	7,672	2,105	6,614	8,018	24,973
1983 .....	106,194	57,260	3,245	2,811	4,532	9,030	2,134	6,343	7,803	21,362
1984 .....	108,101	57,506	3,263	3,045	4,420	10,258	2,022	6,229	8,374	19,895
1985 .....	113,310	60,233	3,374	3,373	4,073	11,449	1,984	6,722	9,094	20,164
1986 .....	115,136	59,606	3,474	3,150	3,893	11,787	1,842	6,713	8,622	20,125
1987 .....	115,171	60,244	3,315	3,271	3,781	12,444	1,739	6,382	8,634	20,678
1988 .....	115,591	61,486	3,434	3,065	3,957	13,016	1,722	6,360	9,073	20,859
1989 .....	114,333	61,250	3,378	2,981	3,800	12,418	1,830	6,308	9,152	21,383
1990 .....	116,047	62,617	3,507	3,010	3,959	12,858	1,896	6,739	9,589	21,059
1991 .....	124,540	65,072	3,574	3,344	4,001	13,110	1,954	6,811	10,306	21,972
Men										
1975 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977 .....	65,351	35,424	2,721	1,984	2,926	2,937	1,393	4,645	3,902	14,916
1978 1/ .....	62,869	34,305	2,587	1,846	2,679	3,143	1,496	4,249	3,608	14,697
1979 .....	64,035	35,309	2,509	1,929	2,766	3,580	1,528	3,986	3,426	15,585
1980 .....	65,042	36,304	2,450	1,919	2,933	4,212	1,576	3,778	3,552	15,884
1981 .....	65,008	35,077	2,440	1,925	2,953	4,907	1,388	3,331	3,348	14,785
1982 .....	65,430	36,129	2,455	2,150	3,027	5,506	1,613	3,330	3,364	14,684
1983 .....	65,339	33,837	2,499	2,049	2,976	6,259	1,595	3,073	3,134	12,252
1984 .....	66,210	34,168	2,482	2,219	2,933	7,331	1,539	3,091	3,340	11,233
1985 .....	69,335	35,281	2,573	2,469	2,607	8,187	1,466	3,308	3,393	11,278
1986 .....	70,150	35,075	2,665	2,312	2,466	8,719	1,344	3,314	3,129	11,126
1987 .....	70,206	35,271	2,521	2,378	2,360	9,080	1,246	3,196	3,064	11,424
1988 .....	69,133	35,622	2,608	2,206	2,518	9,414	1,214	2,990	3,288	11,384
1989 .....	67,592	34,929	2,536	2,096	2,437	9,032	1,296	2,859	3,208	11,465
1990 .....	68,770	35,419	2,593	2,079	2,543	9,540	1,311	3,117	3,046	11,190
1991 .....	71,589	36,644	2,595	2,331	2,527	9,784	1,327	3,150	3,314	11,616
Women										
1975 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977 .....	25,104	16,112	591	354	1,265	634	258	2,871	3,243	6,896
1978 1/ .....	27,722	17,364	632	400	1,219	760	333	2,911	3,590	7,519
1979 .....	31,537	19,897	689	509	1,317	970	401	3,043	4,073	8,895
1980 .....	34,234	21,240	685	554	1,316	1,238	425	3,078	4,209	9,735
1981 .....	36,986	22,249	741	847	1,377	1,770	346	3,174	4,243	9,951
1982 .....	40,026	23,895	717	736	1,557	2,166	492	3,264	4,654	10,289
1983 .....	40,855	23,423	746	762	1,556	2,771	539	3,270	4,669	9,110
1984 .....	41,891	23,338	781	826	1,487	2,927	483	3,138	5,034	8,662
1985 .....	43,975	24,952	801	904	1,466	3,262	518	3,414	5,701	8,886
1986 .....	44,986	24,531	809	838	1,427	3,068	498	3,399	5,493	8,999
1987 .....	44,965	24,973	794	893	1,421	3,364	491	3,186	5,570	9,254
1988 .....	46,458	25,864	826	859	1,439	3,602	508	3,370	5,785	9,475
1989 .....	46,741	26,321	842	885	1,363	3,386	534	3,449	5,944	9,918
1990 .....	47,277	27,198	914	931	1,416	3,318	585	3,622	6,543	9,869
1991 .....	52,951	28,428	979	1,013	1,474	3,326	627	3,661	6,992	10,356

See explanatory information, if any, and SOURCE(S) at end of table.



Table C-5. Part-time science and engineering graduate students in doctorate-granting institutions, by sex and field: 1975-91

Page 2 of 2

Year	Engineering									Health fields
	Engineering, total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical & materials engineering	Other engineering	
Total enrollment										
1975 .....	28,018	411	1,518	4,728	7,589	7,071	3,288	533	2,880	6,423
1976 .....	27,152	296	1,478	4,445	7,317	6,691	3,061	480	3,384	7,565
1977 .....	28,239	318	1,306	4,582	8,185	6,606	3,401	550	3,291	10,680
1978 .....	27,094	315	1,385	4,442	8,045	5,827	3,254	526	3,300	11,619
1979 .....	27,992	325	1,357	4,583	7,950	6,488	3,256	536	3,497	12,374
1980 .....	27,726	406	1,491	4,416	8,338	5,366	3,425	603	3,681	14,006
1981 .....	29,245	396	1,471	4,488	8,664	5,530	3,576	611	4,509	15,423
1982 .....	29,173	414	1,515	4,101	9,215	5,193	3,639	577	4,519	16,259
1983 .....	32,189	448	1,679	4,503	10,594	5,416	3,911	652	4,986	16,745
1984 .....	32,644	468	1,670	4,518	11,030	5,384	4,455	709	4,410	17,951
1985 .....	34,969	526	1,722	4,571	11,915	6,505	4,563	748	4,419	18,108
1986 .....	36,309	633	1,524	4,398	11,999	7,132	4,993	737	4,893	19,221
1987 .....	36,171	625	1,498	4,245	12,446	7,409	5,109	835	4,004	18,756
1988 .....	34,857	669	1,343	4,267	12,643	6,525	4,838	786	3,786	19,248
1989 .....	34,019	645	1,273	4,284	12,510	5,731	4,775	782	4,019	19,064
1990 .....	34,977	829	1,386	4,543	12,449	5,643	4,765	885	4,477	18,453
1991 .....	36,167	727	1,453	5,149	12,599	6,351	5,249	961	3,678	23,301
Men										
1975 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977 .....	26,994	312	1,211	4,360	7,876	6,278	3,281	517	3,161	2,933
1978 1/ .....	25,672	306	1,253	4,194	7,769	5,429	3,110	482	3,129	2,892
1979 .....	25,957	312	1,188	4,262	7,500	5,885	3,076	475	3,259	2,769
1980 .....	25,541	386	1,281	4,045	7,935	4,755	3,235	536	3,368	3,197
1981 .....	26,570	380	1,234	4,099	8,157	4,772	3,320	519	4,089	3,361
1982 .....	26,121	377	1,299	3,645	8,554	4,427	3,381	474	3,964	3,180
1983 .....	28,504	406	1,447	3,992	9,614	4,565	3,617	537	4,326	2,998
1984 .....	28,936	423	1,439	3,991	10,126	4,468	4,099	603	3,787	3,106
1985 .....	30,791	490	1,470	3,995	10,836	5,447	4,167	608	3,778	3,263
1986 .....	31,568	582	1,273	3,811	10,732	5,866	4,537	606	4,161	3,507
1987 .....	31,297	569	1,231	3,662	11,119	6,001	4,649	692	3,374	3,638
1988 .....	29,982	611	1,055	3,638	11,247	5,238	4,353	625	3,215	3,529
1989 .....	29,284	589	1,044	3,622	11,106	4,604	4,327	531	3,361	3,379
1990 .....	29,951	743	1,144	3,835	11,032	4,538	4,279	706	3,674	3,400
1991 .....	31,098	656	1,182	4,236	11,222	5,206	4,762	747	3,087	3,847
Women										
1975 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977 .....	1,245	6	95	222	309	330	120	33	130	7,747
1978 1/ .....	1,540	9	132	267	375	398	144	44	171	8,818
1979 .....	2,035	13	169	321	450	603	180	61	238	9,605
1980 .....	2,185	20	210	371	403	611	190	67	313	10,809
1981 .....	2,675	16	237	389	507	758	256	92	420	12,062
1982 .....	3,052	37	216	456	661	766	258	103	555	13,079
1983 .....	3,685	42	232	511	980	851	294	115	660	13,747
1984 .....	3,708	45	231	527	904	916	356	106	623	14,845
1985 .....	4,178	36	252	576	1,079	1,058	396	140	641	14,845
1986 .....	4,741	51	251	587	1,267	1,266	456	131	732	15,714
1987 .....	4,874	56	267	583	1,327	1,408	460	143	630	15,118
1988 .....	4,875	58	288	629	1,396	1,287	485	161	571	15,719
1989 .....	4,735	56	229	862	1,404	1,127	448	151	658	15,685
1990 .....	5,026	86	242	708	1,417	1,105	486	179	803	15,053
1991 .....	5,069	71	271	913	1,377	1,145	487	214	591	19,454

1/ Distribution by sex data were not requested in 1978; totals represent estimates based on 1977 and 1979 data.

KEY: NA = Not available

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table C-6. Science and engineering graduate students in doctorate-granting institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields	341,360	344,655	353,696	364,234	368,358	373,909	379,521	384,911	411,296
Total, science/engineering fields	304,217	306,073	314,928	324,140	328,434	332,738	337,265	343,606	360,723
Engineering, total	84,483	86,236	89,431	94,841	96,214	96,123	96,382	98,355	105,092
Aerospace	2,273	2,308	2,506	2,771	2,980	3,186	3,387	3,775	3,974
Agricultural	969	954	941	1,054	1,063	1,039	1,031	939	983
Biomedical	1,185	1,288	1,317	1,481	1,613	1,676	1,853	2,049	2,185
Chemical	7,352	7,196	7,015	6,891	6,905	6,532	6,361	6,559	7,000
Civil	14,036	14,371	14,089	14,102	13,625	13,896	13,927	14,336	15,985
Electrical	23,448	24,491	26,273	27,731	28,903	29,655	30,107	30,205	31,780
Engineering science	1,981	1,900	1,838	2,128	2,111	2,167	2,058	1,993	2,124
Industrial	8,546	8,655	9,847	10,836	11,454	10,701	10,223	10,119	11,773
Mechanical	12,089	12,966	13,246	14,580	15,064	15,024	14,960	15,102	16,620
Metallurgical/materials	3,338	3,572	3,823	4,077	4,244	4,227	4,469	4,783	4,995
Mining	498	477	463	487	484	450	388	409	475
Nuclear	1,203	1,234	1,220	1,265	1,279	1,303	1,323	1,278	1,282
Petroleum	724	732	752	726	790	711	651	638	700
Engineering, n.e.c.	6,841	6,092	6,101	6,712	5,699	5,556	5,644	6,170	5,216
Sciences, total	219,734	219,837	225,497	229,299	232,220	236,615	240,883	245,251	255,631
Physical sciences	27,747	28,410	29,312	30,543	30,967	31,212	31,806	31,851	32,938
Astronomy	618	639	671	689	722	731	789	810	829
Chemistry	16,548	16,599	17,152	17,602	17,667	17,462	17,713	17,653	18,317
Physics	10,512	10,985	11,297	12,014	12,330	12,787	13,116	13,189	13,576
Physical sciences, n.e.c.	69	187	192	238	248	212	188	199	216
Earth, atmospheric, & ocean sciences	14,327	14,329	14,263	14,036	13,368	12,909	12,702	12,840	13,224
Atmospheric sciences	884	895	951	956	948	929	900	925	956
Geosciences	9,688	9,716	9,533	9,176	8,385	7,904	7,576	7,199	7,068
Oceanography	1,907	1,929	1,984	2,027	2,022	1,926	2,070	2,113	2,173
Earth, atmos. & ocean sci., n.e.c.	1,848	1,789	1,795	1,877	2,013	2,150	2,156	2,603	3,027
Mathematical sciences	14,846	15,029	15,218	15,616	16,122	16,757	16,804	17,113	17,526
Computer sciences	18,306	20,366	23,823	25,176	26,083	26,711	26,481	27,547	27,693
Agricultural sciences	11,644	11,446	10,799	10,779	10,430	10,396	10,443	10,539	10,747
Biological sciences	41,330	41,671	42,201	43,076	43,341	44,353	45,441	45,640	48,093
Anatomy	1,037	1,029	993	973	1,011	1,056	1,078	996	1,046
Biochemistry	4,165	4,432	4,632	4,852	4,778	4,901	5,055	4,987	5,175
Biology	9,507	9,483	9,492	9,717	9,561	9,728	10,016	10,104	10,437
Biometry/epidemiology	1,156	1,004	1,360	1,434	1,610	1,735	1,777	1,923	2,086
Biophysics	450	433	441	547	591	592	655	599	663
Botany	3,254	3,218	3,160	3,101	2,960	2,892	2,806	2,516	2,611
Cell biology	1,182	1,256	1,429	1,716	1,964	2,078	2,234	2,427	2,804
Ecology	962	1,034	978	956	899	963	1,037	1,083	1,125
Entomology/parasitology	1,475	1,438	1,342	1,306	1,244	1,240	1,181	1,173	1,171
Genetics	986	1,012	1,075	1,219	1,273	1,247	1,321	1,287	1,482
Microbiology	4,137	4,229	4,342	4,280	4,360	4,708	4,763	4,727	4,879
Nutrition	4,093	4,023	4,005	3,987	3,976	3,927	3,917	3,961	3,919
Pathology	1,406	1,410	1,299	1,318	1,342	1,326	1,350	1,336	1,446
Pharmacology	2,063	2,045	2,105	2,078	2,076	2,131	2,270	2,297	2,436
Physiology	1,994	2,160	2,211	2,220	2,213	2,220	2,206	2,276	2,329
Zoology	2,390	2,266	2,103	2,065	2,097	2,022	2,075	2,025	2,173
Biosciences, n.e.c.	1,073	1,199	1,234	1,307	1,386	1,587	1,700	1,923	2,331
Psychology	29,925	29,946	30,385	30,519	31,009	32,387	33,392	34,244	36,358
Social sciences	61,609	58,640	59,496	59,554	60,900	61,890	63,814	65,477	69,052
Agricultural economics	2,237	2,212	2,200	2,184	2,152	2,209	2,227	2,232	2,313
Anthropology	5,399	5,371	5,408	5,592	5,483	5,710	5,916	6,215	6,410
Economics (except agricultural)	11,917	11,420	11,319	11,157	11,124	11,203	11,283	11,422	11,906
Geography	2,615	2,577	2,515	2,571	2,671	2,601	2,819	2,868	3,123
History and philosophy of science	253	274	272	266	284	288	342	369	383
Linguistics	2,813	2,920	2,804	2,819	2,920	2,881	2,919	2,955	3,102
Political science	22,216	20,130	21,245	21,607	22,227	22,242	23,165	23,217	25,073
Sociology	6,362	6,110	5,994	5,836	6,308	6,426	6,628	6,877	7,223
Sociology/anthropology	1,014	960	906	904	882	912	946	1,096	953
Social sciences, n.e.c.	6,783	6,666	6,833	6,618	6,839	7,418	7,569	8,226	8,566
Total, health fields	37,143	38,582	38,768	40,094	39,924	41,171	42,256	41,305	50,573
Dentistry	776	854	836	929	1,049	1,078	998	941	1,030
Neurology	247	303	323	372	472	586	723	782	981
Nursing	14,986	15,913	15,069	15,282	14,749	14,478	13,998	11,927	18,640
Pharmaceutical sciences	2,625	2,500	2,533	2,672	2,602	2,609	2,909	2,788	3,151
Preventive medicine/community health	6,492	6,657	7,101	7,043	7,295	7,537	7,550	8,079	8,321
Speech pathology/audiology	5,837	5,772	5,984	6,030	5,442	5,926	6,148	6,275	6,889
Veterinary sciences	440	531	610	607	711	735	782	881	875
Clinical medicine, n.e.c.	1,282	1,293	1,480	1,420	1,503	1,580	1,595	1,615	1,892
Health related, n.e.c.	4,458	4,759	4,832	5,739	6,101	6,642	7,553	8,017	8,794

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table C-7. Science and engineering graduate students in doctorate-granting institutions,  
by geographic distribution: 1983-91**

Page 1 of 1

Division and State	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all institutions .....	341,360	344,655	353,696	364,234	368,358	373,909	379,521	384,911	411,296
New England .....	26,206	26,165	27,109	27,863	27,556	28,644	28,126	28,179	30,768
Connecticut .....	3,772	3,648	3,930	4,121	4,317	4,341	4,335	4,266	4,540
Maine .....	509	580	523	538	614	649	667	689	752
Massachusetts .....	18,646	18,641	19,313	19,703	19,100	20,048	19,488	19,701	21,669
New Hampshire .....	794	803	844	878	846	938	955	1,013	1,059
Rhode Island .....	1,851	1,834	1,883	1,993	2,074	2,018	2,083	1,885	2,100
Vermont .....	634	659	616	630	605	650	618	625	648
Middle Atlantic .....	64,109	65,392	66,257	68,132	66,898	67,979	67,307	67,283	70,878
New Jersey .....	9,132	10,001	10,322	10,377	10,843	11,178	10,726	10,479	10,776
New York .....	38,229	38,626	38,891	40,250	38,622	39,173	38,703	38,794	40,706
Pennsylvania .....	16,828	16,765	17,044	17,505	17,433	17,628	17,878	18,010	19,396
East North Central .....	61,981	61,197	62,036	64,326	66,903	68,020	70,561	71,097	76,207
Illinois .....	16,344	16,547	17,261	17,829	18,663	18,989	19,542	19,814	20,561
Indiana .....	8,143	7,439	6,913	7,670	8,037	8,102	8,937	9,356	9,780
Michigan .....	12,541	12,640	12,804	13,179	13,470	13,501	14,634	14,962	15,621
Ohio .....	17,392	16,921	17,484	18,017	18,933	13,516	19,335	19,130	21,594
Wisconsin .....	7,561	7,650	7,574	7,631	7,800	7,912	8,113	7,835	8,651
West North Central .....	23,323	23,243	23,806	24,298	24,521	24,935	25,179	25,529	27,121
Iowa .....	4,627	4,517	4,651	4,810	4,818	5,005	4,971	5,303	5,507
Kansas .....	4,427	4,367	4,225	4,230	4,387	4,501	4,605	4,599	4,880
Minnesota .....	5,127	5,255	5,641	5,570	5,373	5,534	5,681	5,677	5,840
Missouri .....	5,655	5,680	5,811	6,224	6,408	6,296	6,304	6,166	6,695
Nebraska .....	1,752	1,742	1,721	1,676	1,764	1,805	1,855	1,911	2,144
North Dakota .....	946	906	949	970	915	947	947	886	916
South Dakota .....	789	776	808	818	856	851	915	987	1,139
South Atlantic .....	47,881	49,769	52,104	54,724	56,387	57,840	58,847	61,536	65,707
Delaware .....	1,180	1,112	1,150	1,189	1,303	1,198	1,179	1,148	1,447
District of Columbia .....	7,703	8,120	8,531	9,110	9,204	8,726	8,219	8,265	8,611
Florida .....	8,953	9,067	9,961	10,019	10,595	11,625	11,883	12,911	14,173
Georgia .....	5,683	6,290	6,005	6,386	6,726	6,749	6,902	7,006	7,795
Maryland .....	5,880	5,961	6,185	6,525	6,503	7,144	7,498	7,758	8,073
North Carolina .....	7,152	7,238	7,234	7,720	7,799	7,977	8,294	8,505	8,856
South Carolina .....	2,864	2,925	2,931	3,223	3,313	3,167	3,366	3,434	3,854
Virginia .....	6,798	7,403	8,492	8,977	9,458	9,666	9,874	10,720	10,994
West Virginia .....	1,668	1,653	1,615	1,575	1,486	1,588	1,612	1,759	1,904
East South Central .....	12,401	12,941	13,364	13,929	14,340	15,040	16,275	15,621	17,359
Alabama .....	3,042	3,382	3,759	4,089	4,472	4,710	5,127	5,044	5,757
Kentucky .....	2,774	2,837	2,736	2,742	2,885	2,942	3,178	2,900	3,315
Mississippi .....	2,001	2,200	2,172	2,250	2,255	2,389	2,501	2,366	2,550
Tennessee .....	4,584	4,522	4,697	4,848	4,728	4,999	5,469	5,311	5,737
West South Central .....	31,930	32,522	32,231	32,711	32,703	33,052	34,574	35,810	39,255
Arkansas .....	1,172	1,182	1,181	1,161	1,180	1,053	1,029	1,108	1,495
Louisiana .....	4,344	4,564	4,548	4,388	4,342	4,241	4,342	4,630	5,323
Oklahoma .....	3,849	3,813	3,924	3,882	4,196	4,090	4,102	4,393	4,622
Texas .....	22,565	22,963	22,578	23,280	22,985	23,668	25,101	25,679	27,815
Mountain .....	22,255	22,080	22,861	23,783	24,422	24,385	24,502	25,587	28,104
Arizona .....	6,147	6,212	6,743	6,705	6,723	7,012	7,167	7,355	7,648
Colorado .....	6,384	6,105	6,190	7,056	7,399	7,278	7,000	7,707	8,693
Idaho .....	1,004	1,008	1,041	1,035	1,173	1,225	1,348	1,510	1,512
Montana .....	1,019	1,030	980	911	891	941	971	957	1,040
Nevada .....	532	561	557	515	619	656	721	841	871
New Mexico .....	2,551	2,464	2,551	2,647	2,815	2,760	2,765	2,802	3,019
Utah .....	3,783	3,921	3,986	4,154	4,043	3,796	3,728	3,700	4,286
Wyoming .....	835	779	813	760	759	717	802	715	1,029
Pacific .....	48,934	48,910	51,376	51,948	52,387	51,779	51,853	51,863	53,068
Alaska .....	424	352	381	399	387	404	444	487	480
California .....	38,410	38,100	40,401	40,830	41,278	40,489	40,684	40,188	40,615
Hawaii .....	1,782	1,702	1,705	1,820	1,822	1,829	1,857	1,981	2,092
Oregon .....	3,093	3,234	3,262	3,429	3,454	3,580	3,549	3,646	4,074
Washington .....	5,225	5,522	5,627	5,470	5,446	5,477	5,319	5,561	5,807
Outlying areas .....	2,260	2,436	2,552	2,520	2,241	2,231	2,297	2,406	2,829

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table C-8. Male science and engineering graduate students in doctorate-granting institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields	224,721	226,340	231,918	238,217	240,681	240,579	241,878	244,032	255,281
Total, science/engineering fields	215,469	216,971	222,256	228,331	230,087	230,127	231,092	233,137	243,239
Engineering, total	75,399	76,676	79,170	83,346	84,291	83,874	83,750	84,949	90,812
Aerospace	2,151	2,177	2,344	2,572	2,759	2,962	3,151	3,491	3,857
Agricultural	896	872	863	970	967	953	944	838	858
Biomedical	932	1,013	1,034	1,144	1,233	1,254	1,390	1,513	1,604
Chemical	6,371	6,252	6,037	5,871	5,786	5,476	5,352	5,441	5,764
Civil	12,277	12,449	12,066	12,077	11,686	11,777	11,671	11,914	13,109
Electrical	21,551	22,481	24,040	25,065	26,095	26,650	26,964	26,921	28,334
Engineering science	1,740	1,649	1,642	1,875	1,864	1,930	1,816	1,702	1,840
Industrial	7,108	7,136	8,177	8,850	9,330	8,698	8,234	8,157	9,826
Mechanical	11,325	12,062	12,304	13,509	13,902	13,728	13,678	13,804	15,205
Metallurgical/materials	2,903	3,114	3,248	3,429	3,535	3,490	3,686	3,917	4,041
Mining	456	437	436	453	445	410	352	361	428
Nuclear	1,119	1,146	1,113	1,142	1,151	1,176	1,182	1,123	1,105
Petroleum	652	672	691	680	741	666	623	608	649
Engineering, n.e.c.	5,918	5,216	5,175	5,709	4,797	4,704	4,707	5,159	4,392
Sciences, total	140,070	140,295	143,086	144,985	145,796	146,253	147,342	148,188	152,627
Physical sciences	22,366	22,736	23,318	24,199	24,374	24,254	24,519	24,434	24,921
Astronomy	526	541	563	568	602	591	649	645	657
Chemistry	12,441	12,340	12,765	12,975	12,920	12,432	12,433	12,293	12,459
Physics	9,356	9,755	9,867	10,514	10,717	11,111	11,331	11,383	11,682
Physical sciences, n.e.c.	43	100	123	142	135	120	106	113	123
Earth, atmospheric, & ocean sciences	10,710	10,772	10,636	10,376	9,878	9,409	9,152	9,120	9,238
Atmospheric sciences	756	759	796	777	780	766	725	740	767
Geosciences	7,309	7,377	7,213	6,960	6,364	5,971	5,736	5,408	5,216
Oceanography	1,390	1,387	1,409	1,396	1,426	1,323	1,401	1,432	1,427
Earth, atmos., & ocean sci., n.e.c.	1,255	1,249	1,218	1,243	1,306	1,349	1,290	1,540	1,828
Mathematical sciences	10,625	10,808	10,794	11,036	11,395	11,668	11,746	11,902	12,107
Computer sciences	13,325	15,065	17,934	19,252	19,867	20,215	20,285	21,264	21,358
Agricultural sciences	8,699	8,495	7,998	7,994	7,661	7,530	7,520	7,424	7,405
Biological sciences	24,089	24,218	24,299	24,529	24,606	24,794	25,027	24,867	25,999
Anatomy	632	605	569	560	574	598	598	541	547
Biochemistry	2,618	2,783	2,911	2,982	2,905	2,921	3,044	2,944	3,046
Biology	5,565	5,560	5,489	5,573	5,578	5,539	5,601	5,654	5,732
Biometry/epidemiology	547	472	640	666	761	786	754	886	921
Biophysics	338	326	331	410	450	443	493	448	500
Botany	2,062	2,036	1,974	1,978	1,821	1,783	1,734	1,535	1,573
Cell biology	774	789	911	1,044	1,199	1,233	1,290	1,353	1,524
Ecology	643	714	638	602	555	597	632	656	859
Entomology/parasitology	1,090	1,066	992	948	906	881	817	815	830
Genetics	509	545	595	663	671	659	673	647	762
Microbiology	2,335	2,373	2,450	2,392	2,416	2,593	2,559	2,482	2,556
Nutrition	1,298	1,278	1,304	1,265	1,299	1,201	1,190	1,222	1,219
Pathology	645	836	754	783	770	782	786	765	825
Pharmacology	1,325	1,274	1,302	1,267	1,232	1,281	1,300	1,294	1,301
Physiology	1,297	1,368	1,375	1,366	1,378	1,357	1,313	1,327	1,368
Zoology	1,588	1,464	1,355	1,296	1,308	1,240	1,290	1,220	1,302
Biosciences, n.e.c.	823	709	709	734	783	900	953	1,080	1,334
Psychology	12,964	12,610	12,255	11,944	11,836	11,965	12,085	11,837	12,364
Social sciences	37,292	35,591	35,852	35,655	36,179	36,218	37,008	37,340	39,235
Agricultural economics	1,760	1,735	1,703	1,689	1,652	1,669	1,652	1,641	1,703
Anthropology	2,337	2,358	2,392	2,358	2,355	2,417	2,448	2,565	2,834
Economics (except agricultural)	9,093	8,712	8,571	8,427	8,382	8,356	8,332	8,333	8,580
Geography	1,744	1,754	1,696	1,755	1,779	1,763	1,879	1,913	2,039
History and philosophy of science	161	187	180	169	198	184	217	235	237
Linguistics	1,165	1,196	1,152	1,194	1,233	1,212	1,257	1,289	1,383
Political science	13,788	12,686	13,109	13,255	13,570	13,280	13,654	13,397	14,389
Sociology	3,041	2,851	2,833	2,881	2,877	2,959	3,051	3,126	3,274
Sociology/anthropology	505	474	443	436	429	404	415	455	423
Social sciences, n.e.c.	3,718	3,638	3,773	3,691	3,704	3,974	4,103	4,388	4,573
Total, health fields	9,252	9,369	9,662	9,886	10,594	10,452	10,784	10,895	12,042
Dentistry	607	666	648	724	770	786	711	668	725
Neurology	175	194	200	231	295	350	433	440	564
Nursing	614	643	613	568	888	619	639	494	877
Pharmaceutical sciences	1,767	1,624	1,642	1,707	1,585	1,547	1,718	1,674	1,825
Preventive medicine/community health	2,765	2,737	2,928	3,007	3,324	3,141	2,876	3,164	3,289
Speech pathology/audiology	875	852	911	777	609	703	614	618	585
Veterinary sciences	277	326	379	374	436	439	455	498	514
Clinical medicine, n.e.c.	735	706	735	729	789	814	874	898	1,007
Health related, n.e.c.	1,437	1,621	1,606	1,769	1,898	2,053	2,466	2,441	2,656

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



**Table C-9. Male science and engineering graduate students in doctorate-granting institutions, by geographic distribution: 1983-91**

Page 1 of 1

Division and State	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all institutions .....	224,721	226,340	231,918	238,217	240,681	240,579	241,876	244,032	255,281
New England .....	17,693	17,670	17,906	18,193	18,113	18,598	17,998	18,093	19,257
Connecticut .....	2,372	2,285	2,348	2,413	2,529	2,533	2,474	2,506	2,519
Maine .....	339	366	336	353	416	433	446	450	516
Massachusetts .....	12,842	12,836	13,071	13,200	12,923	13,308	12,771	12,866	13,878
New Hampshire .....	536	530	526	557	556	623	636	648	866
Rhode Island .....	1,220	1,194	1,241	1,318	1,358	1,324	1,304	1,253	1,282
Vermont .....	384	439	384	352	331	377	367	370	376
Middle Atlantic .....	40,234	40,949	41,665	43,174	42,462	42,514	42,386	41,701	43,367
New Jersey .....	6,263	7,075	7,344	7,254	7,645	7,819	7,581	7,082	7,032
New York .....	22,456	22,517	22,834	24,123	23,304	23,325	23,157	23,115	24,012
Pennsylvania .....	11,515	11,357	11,487	11,797	11,513	11,370	11,648	11,504	12,323
East North Central .....	41,016	40,521	41,189	42,143	43,856	43,937	44,688	44,981	48,889
Illinois .....	10,826	11,012	11,356	11,422	11,972	12,065	12,171	12,540	12,490
Indiana .....	5,434	4,695	4,775	4,973	5,241	5,265	5,668	5,757	6,045
Michigan .....	8,528	8,615	8,630	9,085	9,412	9,224	9,668	9,789	10,195
Ohio .....	11,239	11,152	11,406	11,666	12,211	12,349	12,051	11,747	12,820
Wisconsin .....	4,989	5,047	5,022	4,997	5,020	5,034	5,130	5,148	5,339
West North Central .....	15,616	15,423	15,686	16,071	16,116	16,397	16,437	16,646	17,172
Iowa .....	3,263	3,137	3,185	3,267	3,246	3,376	3,386	3,506	3,618
Kansas .....	2,722	2,733	2,606	2,600	2,730	2,790	2,810	2,794	2,875
Minnesota .....	3,229	3,285	3,638	3,668	3,516	3,594	3,582	3,578	3,627
Missouri .....	3,869	3,860	3,897	4,187	4,232	4,167	4,196	4,248	4,270
Nebraska .....	1,244	1,209	1,150	1,143	1,177	1,250	1,228	1,300	1,433
North Dakota .....	718	655	660	675	644	647	646	612	624
South Dakota .....	571	544	550	531	571	573	589	608	725
South Atlantic .....	30,911	32,103	33,252	35,120	35,860	35,905	36,305	37,524	39,363
Delaware .....	755	709	738	770	855	795	822	811	965
District of Columbia .....	5,141	5,441	5,604	5,863	5,708	5,200	4,712	4,788	4,881
Florida .....	5,887	5,951	6,419	6,552	6,835	7,230	7,504	7,827	8,496
Georgia .....	3,900	4,224	4,025	4,272	4,580	4,542	4,546	4,574	4,962
Maryland .....	3,419	3,424	3,612	3,794	3,886	4,220	4,455	4,560	4,654
North Carolina .....	4,370	4,465	4,359	4,751	4,682	4,812	4,939	5,071	5,071
South Carolina .....	1,920	1,997	1,909	2,169	2,249	2,092	2,195	2,237	2,498
Virginia .....	4,413	4,819	5,572	5,889	6,205	6,105	6,229	6,675	6,781
West Virginia .....	1,106	1,073	1,014	1,040	860	909	903	981	1,055
East South Central .....	8,014	8,322	8,512	8,983	9,124	9,753	10,149	10,184	10,883
Alabama .....	1,891	2,098	2,357	2,596	2,752	2,955	3,158	3,337	3,653
Kentucky .....	1,782	1,787	1,763	1,789	1,831	1,971	1,981	1,894	2,040
Mississippi .....	1,370	1,506	1,447	1,506	1,512	1,573	1,606	1,609	1,681
Tennessee .....	2,971	2,931	2,945	3,092	3,029	3,254	3,404	3,344	3,509
West South Central .....	21,098	21,456	21,546	21,936	22,248	21,570	22,541	23,387	25,337
Arkansas .....	826	834	806	797	804	716	695	726	1,068
Louisiana .....	2,968	3,115	3,107	3,009	3,028	2,874	2,968	3,150	3,564
Oklahoma .....	2,718	2,657	2,770	2,873	2,984	2,749	2,781	2,907	3,013
Texas .....	14,586	14,850	14,863	15,257	15,432	15,231	16,097	16,604	17,692
Mountain .....	15,524	15,155	15,849	16,231	16,645	16,532	16,735	16,975	18,097
Arizona .....	4,253	4,213	4,547	4,605	4,719	4,782	4,854	4,740	4,896
Colorado .....	4,184	3,932	4,060	4,500	4,564	4,607	4,636	4,918	5,280
Idaho .....	773	783	781	775	877	894	991	1,060	1,038
Montana .....	690	678	655	560	606	662	663	647	700
Nevada .....	362	404	419	354	423	448	507	600	574
New Mexico .....	1,857	1,742	1,798	1,846	2,004	1,898	1,906	1,997	2,024
Utah .....	2,734	2,819	2,901	2,979	2,881	2,718	2,639	2,513	2,931
Wyoming .....	671	584	688	592	571	523	539	500	654
Pacific .....	33,803	33,655	35,212	35,308	35,272	34,509	33,792	33,602	33,886
Alaska .....	300	258	275	293	274	278	302	321	322
California .....	26,663	26,326	27,864	27,866	27,909	27,149	26,578	26,184	25,945
Hawaii .....	1,049	1,013	984	1,102	1,087	1,058	1,092	1,133	1,233
Oregon .....	2,266	2,316	2,318	2,475	2,493	2,546	2,481	2,560	2,811
Washington .....	3,505	3,742	3,771	3,572	3,509	3,478	3,339	3,404	3,575
Outlying areas .....	812	1,086	1,101	1,058	985	864	845	939	1,030

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



Table C-10. Female science and engineering graduate students in doctorate-granting institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields .....	116,639	118,315	121,778	126,017	127,677	133,330	137,645	140,879	156,015
Total, science/engineering fields .....	88,748	89,102	92,672	95,809	98,347	102,611	106,173	110,469	117,484
Engineering, total .....	9,084	9,560	10,261	11,495	11,923	12,249	12,632	13,406	14,480
Aerospace .....	122	131	162	199	221	224	236	284	317
Agricultural .....	73	82	78	84	96	86	87	101	125
Biomedical .....	253	275	283	337	380	422	463	536	581
Chemical .....	981	944	978	1,020	1,119	1,056	1,009	1,118	1,236
Civil .....	1,759	1,922	2,023	2,025	1,939	2,119	2,256	2,422	2,878
Electrical .....	1,897	2,010	2,233	2,666	2,808	3,005	3,143	3,284	3,446
Engineering science .....	241	251	196	253	247	237	242	291	284
Industrial .....	1,438	1,519	1,670	1,986	2,124	2,003	1,989	1,962	2,147
Mechanical .....	764	904	942	1,071	1,162	1,296	1,282	1,298	1,415
Metallurgical/materials .....	435	458	575	648	709	737	783	866	954
Mining .....	42	40	27	34	39	40	36	48	47
Nuclear .....	84	88	107	123	128	127	141	155	177
Petroleum .....	72	60	61	48	49	45	28	30	51
Engineering, n.e.c. ....	923	876	926	1,003	902	852	937	1,011	824
Sciences, total .....	79,664	79,542	82,411	84,314	86,424	90,362	93,541	97,063	103,004
Physical sciences .....	5,381	5,674	5,994	6,344	6,593	6,958	7,287	7,417	8,017
Astronomy .....	92	98	108	121	120	140	140	165	172
Chemistry .....	4,107	4,259	4,387	4,627	4,747	5,050	5,280	5,360	5,858
Physics .....	1,156	1,230	1,430	1,500	1,613	1,676	1,785	1,806	1,894
Physical sciences, n.e.c. ....	26	87	69	96	113	92	82	86	93
Earth, atmospheric, & ocean sciences .....	3,617	3,557	3,627	3,660	3,490	3,500	3,550	3,720	3,986
Atmospheric sciences .....	128	136	155	179	168	163	175	185	189
Geosciences .....	2,379	2,339	2,320	2,216	2,021	1,933	1,840	1,791	1,852
Oceanography .....	517	542	575	631	596	603	669	681	746
Earth, atmos., & ocean sci., n.e.c. ....	593	540	577	634	705	801	866	1,063	1,199
Mathematical sciences .....	4,221	4,221	4,424	4,580	4,727	4,889	5,058	5,211	5,419
Computer sciences .....	4,981	5,301	5,889	5,924	6,216	6,496	6,196	6,283	6,335
Agricultural sciences .....	2,945	2,951	2,801	2,785	2,769	2,866	2,923	3,115	3,342
Biological sciences .....	17,241	17,453	17,902	18,547	18,735	19,559	20,414	20,773	22,094
Anatomy .....	405	424	424	413	437	458	480	455	499
Biochemistry .....	1,547	1,649	1,721	1,870	1,873	1,980	2,011	2,043	2,129
Biology .....	3,942	3,923	4,003	4,144	3,983	4,189	4,415	4,450	4,705
Biometry/epidemiology .....	609	532	720	768	849	949	1,023	1,037	1,145
Biophysics .....	112	107	110	137	141	149	162	153	163
Botany .....	1,192	1,182	1,186	1,123	1,139	1,109	1,072	981	1,038
Cell biology .....	408	467	518	672	765	845	944	1,074	1,280
Ecology .....	319	320	340	354	344	366	405	427	466
Entomology/parasitology .....	385	372	350	358	338	359	364	358	341
Genetics .....	477	467	480	556	602	586	648	640	720
Microbiology .....	1,802	1,856	1,892	1,888	1,944	2,115	2,204	2,245	2,323
Nutrition .....	2,795	2,745	2,701	2,722	2,677	2,726	2,727	2,739	2,700
Pathology .....	561	574	545	535	572	544	564	571	621
Pharmacology .....	738	771	803	811	844	850	970	1,003	1,135
Physiology .....	697	772	836	854	835	863	893	949	961
Zoology .....	802	802	748	769	789	782	785	805	871
Biosciences, n.e.c. ....	450	490	525	573	603	687	747	843	997
Psychology .....	16,961	17,336	18,130	18,575	19,173	20,422	21,307	22,407	23,994
Social sciences .....	24,317	23,049	23,644	23,899	24,721	25,672	26,806	28,137	29,817
Agricultural economics .....	477	477	497	495	500	540	575	591	610
Anthropology .....	3,062	3,013	3,016	3,234	3,128	3,293	3,468	3,650	3,776
Economics (except agricultural) .....	2,824	2,708	2,748	2,730	2,742	2,847	2,951	3,089	3,326
Geography .....	871	823	819	816	892	838	940	955	1,084
History and philosophy of science .....	92	87	92	97	96	104	125	134	146
Linguistics .....	1,648	1,724	1,652	1,625	1,687	1,669	1,662	1,666	1,719
Political science .....	8,448	7,444	8,136	8,352	8,657	8,962	9,511	9,820	10,884
Sociology .....	3,321	3,259	3,161	3,155	3,431	3,467	3,577	3,751	3,949
Sociology/anthropology .....	509	468	463	468	453	508	531	641	530
Social sciences, n.e.c. ....	3,065	3,028	3,080	2,927	3,135	3,444	3,466	3,840	3,993
Total, health fields .....	27,891	29,213	29,106	30,208	29,330	30,719	31,472	30,410	38,531
Dentistry .....	169	188	188	205	279	292	287	273	305
Neurology .....	72	109	123	141	177	236	290	342	417
Nursing .....	14,372	15,270	14,456	14,714	13,861	13,859	13,359	11,433	17,763
Pharmaceutical sciences .....	858	876	891	965	1,017	1,062	1,193	1,114	1,326
Preventive medicine/community health .....	3,727	3,920	4,173	4,036	3,971	4,396	4,674	4,915	5,032
Speech pathology/audiology .....	4,962	4,920	5,073	5,253	4,833	5,223	5,534	5,657	6,304
Veterinary sciences .....	163	205	231	233	275	296	327	383	361
Clinical medicine, n.e.c. ....	547	587	745	691	714	766	721	717	885
Health related, n.e.c. ....	3,021	3,138	3,226	3,970	4,203	4,589	5,087	5,576	6,138

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table C-11. Female science and engineering graduate students in doctorate-granting institutions, by geographic distribution: 1983-91**

Page 1 of 1

Division and State	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all institutions .....	116,639	118,315	121,778	126,017	127,677	133,330	137,645	140,879	156,015
New England .....	8,513	8,495	9,203	9,670	9,443	10,046	10,128	10,086	11,511
Connecticut .....	1,400	1,363	1,582	1,708	1,788	1,808	1,881	1,760	2,021
Maine .....	170	194	187	185	198	216	221	239	236
Massachusetts .....	5,804	5,805	6,242	6,503	6,177	6,740	6,717	6,835	7,791
New Hampshire .....	258	273	318	321	290	315	319	365	373
Rhode Island .....	631	640	642	675	716	694	759	632	818
Vermont .....	250	220	232	278	274	273	251	255	272
Middle Atlantic .....	23,955	24,443	24,592	24,958	24,436	25,465	24,921	25,582	27,511
New Jersey .....	2,869	2,926	2,978	3,123	3,198	3,359	3,145	3,397	3,744
New York .....	15,773	16,109	16,057	16,127	15,318	15,48	15,546	15,679	16,694
Pennsylvania .....	5,313	5,408	5,557	5,708	5,920	6,258	6,230	6,506	7,073
East North Central .....	20,965	20,676	20,847	22,183	23,047	24,083	25,873	26,116	29,318
Illinois .....	5,518	5,535	5,905	6,407	6,691	6,924	7,371	7,274	8,071
Indiana .....	2,709	2,744	2,138	2,697	2,796	2,837	3,269	3,599	3,735
Michigan .....	4,013	4,025	4,174	4,094	4,058	4,277	4,966	5,173	5,426
Ohio .....	6,153	5,769	6,078	6,351	6,722	7,167	7,284	7,383	8,774
Wisconsin .....	2,572	2,603	2,552	2,634	2,780	2,878	2,983	2,687	3,312
West North Central .....	7,707	7,820	8,120	8,227	8,405	8,542	8,742	8,883	9,949
Iowa .....	1,364	1,380	1,466	1,543	1,572	1,629	1,585	1,797	1,889
Kansas .....	1,705	1,634	1,619	1,630	1,657	1,711	1,795	1,605	2,005
Minnesota .....	1,898	1,970	2,003	1,902	1,857	1,940	2,099	2,099	2,213
Missouri .....	1,786	1,820	1,914	2,037	2,176	2,129	2,008	1,918	2,425
Nebraska .....	508	533	571	533	587	555	628	611	711
North Dakota .....	228	251	269	295	271	300	301	274	292
South Dakota .....	218	232	258	287	265	278	326	379	414
South Atlantic .....	16,970	17,666	18,852	19,604	20,527	21,935	22,542	24,012	26,344
Delaware .....	425	403	412	419	448	403	357	337	482
District of Columbia .....	2,562	2,679	2,927	3,227	3,496	3,526	3,507	3,507	3,730
Florida .....	3,066	3,116	3,542	3,467	3,760	4,395	4,379	5,084	5,677
Georgia .....	1,783	2,066	1,980	2,114	2,148	2,207	2,356	2,432	2,833
Maryland .....	2,461	2,537	2,573	2,731	2,617	2,924	3,043	3,198	3,419
North Carolina .....	2,782	2,773	2,875	2,969	3,117	3,165	3,355	3,434	3,785
South Carolina .....	944	928	1,022	1,054	1,064	1,075	1,191	1,197	1,356
Virginia .....	2,385	2,584	2,920	3,088	3,253	3,561	3,645	4,045	4,213
West Virginia .....	562	580	601	535	626	679	709	778	849
East South Central .....	4,387	4,619	4,852	4,946	5,216	5,287	6,126	5,437	6,476
Alabama .....	1,151	1,284	1,402	1,493	1,720	1,755	1,969	1,707	2,104
Kentucky .....	992	1,050	973	953	1,054	971	1,197	1,006	1,275
Mississippi .....	631	694	725	744	743	816	895	757	869
Tennessee .....	1,613	1,591	1,752	1,756	1,699	1,745	2,065	1,967	2,228
West South Central .....	10,832	11,066	10,685	10,775	10,455	11,482	12,033	12,423	13,918
Arkansas .....	346	348	375	364	376	337	334	382	427
Louisiana .....	1,376	1,449	1,441	1,379	1,314	1,367	1,374	1,480	1,759
Oklahoma .....	1,131	1,156	1,154	1,009	1,212	1,341	1,321	1,486	1,609
Texas .....	7,979	8,113	7,715	8,023	7,553	8,437	9,004	9,075	10,123
Mountain .....	6,731	6,925	7,012	7,552	7,777	7,853	7,767	8,612	10,007
Arizona .....	1,894	1,999	2,196	2,100	2,004	2,230	2,313	2,615	2,752
Colorado .....	2,200	2,173	2,130	2,556	2,835	2,671	2,364	2,789	3,413
Idaho .....	231	225	260	260	296	331	357	450	474
Montana .....	329	352	325	331	285	279	308	310	346
Nevada .....	170	157	138	161	196	208	214	241	297
New Mexico .....	694	722	753	801	811	862	859	805	995
Utah .....	1,049	1,102	1,085	1,175	1,162	1,078	1,089	1,187	1,355
Wyoming .....	164	195	125	168	188	194	263	215	375
Pacific .....	15,131	15,255	16,164	16,640	17,115	17,270	18,061	18,261	19,182
Alaska .....	124	94	106	106	113	126	142	186	158
California .....	11,727	11,774	12,537	12,964	13,369	13,340	14,106	14,004	14,670
Hawaii .....	733	689	721	718	735	771	765	848	859
Oregon .....	827	918	944	954	961	1,034	1,068	1,086	1,263
Washington .....	1,720	1,780	1,856	1,898	1,937	1,999	1,980	2,157	2,232
Outlying areas .....	1,448	1,350	1,451	1,462	1,256	1,367	1,452	1,467	1,799

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table C-12. Science and engineering graduate students in public doctorate-granting institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields	231,150	235,034	239,174	247,867	251,781	256,427	263,141	268,222	288,134
Total, science/engineering fields	204,695	207,556	211,772	218,878	222,275	225,904	231,637	238,063	250,432
Engineering, total	53,361	54,531	57,004	61,064	63,835	64,634	66,483	68,990	74,615
Aerospace	1,613	1,669	1,819	2,035	2,222	2,334	2,506	2,889	3,134
Agricultural	916	900	888	1,003	1,015	994	981	891	943
Biomedical	662	724	737	903	1,004	1,035	1,159	1,213	1,276
Chemical	4,943	4,869	4,783	4,751	4,743	4,517	4,465	4,703	5,084
Civil	9,689	10,077	9,994	9,994	10,261	10,549	10,589	10,651	12,068
Electrical	12,942	13,589	15,225	16,496	17,816	18,277	18,917	19,416	20,844
Engineering science	1,383	1,220	1,129	1,287	1,271	1,263	1,245	1,214	1,357
Industrial	4,218	4,479	5,128	5,561	5,781	5,957	6,560	6,778	8,174
Mechanical	8,141	8,703	9,138	10,119	10,677	10,649	10,563	10,818	12,178
Metallurgical/materials	1,980	2,176	2,315	2,503	2,626	2,591	2,803	3,093	3,367
Mining	430	409	398	417	414	382	328	333	345
Nuclear	963	1,011	1,009	1,058	1,075	1,092	1,107	1,073	1,093
Petroleum	451	484	537	571	604	554	517	507	565
Engineering, n.e.c.	5,050	4,221	3,904	4,386	4,326	4,440	4,743	5,211	4,187
Sciences, total	151,334	153,025	154,768	157,814	158,440	161,270	165,154	169,073	175,817
Physical sciences	19,658	20,111	20,684	21,792	22,119	22,364	22,723	22,741	23,555
Astronomy	419	433	442	469	492	495	516	536	546
Chemistry	11,956	11,944	12,274	12,667	12,743	12,649	12,767	12,624	13,067
Physics	7,214	7,547	7,800	8,462	8,707	9,048	9,273	9,403	9,754
Physical sciences, n.e.c.	69	187	168	194	177	172	167	178	188
Earth, atmospheric, & ocean sciences	11,682	11,906	11,820	11,698	11,132	10,734	10,503	10,645	10,888
Atmospheric sciences	831	844	893	898	888	876	871	897	936
Geosciences	7,923	7,931	7,800	7,533	6,875	6,452	6,141	5,821	5,722
Oceanography	1,603	1,607	1,610	1,676	1,704	1,650	1,733	1,771	1,806
Earth, atmos., & ocean sci., n.e.c.	1,525	1,524	1,517	1,591	1,665	1,756	1,758	2,156	2,424
Mathematical sciences	9,997	10,468	10,862	11,506	12,097	12,670	12,745	13,226	13,452
Computer sciences	11,467	12,446	13,891	14,494	14,580	15,051	15,401	16,262	16,591
Agricultural sciences	11,236	11,056	10,396	10,382	10,036	9,987	10,050	10,096	10,270
Biological sciences	30,555	30,856	31,147	31,769	31,810	32,611	33,358	33,204	34,918
Anatomy	694	689	655	636	657	714	750	711	760
Biochemistry	2,848	3,017	3,208	3,387	3,277	3,393	3,460	3,446	3,545
Biology	6,258	6,225	6,351	6,499	6,440	6,609	6,816	6,856	7,198
Biometry/epidemiology	641	657	718	828	907	1,023	1,072	1,134	1,267
Biophysics	245	220	260	317	356	343	382	313	353
Botany	3,094	3,090	3,027	2,954	2,803	2,731	2,644	2,349	2,443
Cell biology	621	705	742	909	1,063	1,177	1,260	1,356	1,587
Ecology	905	975	929	905	849	884	939	986	991
Entomology/parasitology	1,426	1,383	1,290	1,256	1,177	1,178	1,115	1,105	1,102
Genetics	713	717	779	901	948	909	936	921	1,062
Microbiology	3,123	3,168	3,309	3,244	3,305	3,590	3,585	3,530	3,543
Nutrition	3,220	3,157	3,135	3,163	3,219	3,216	3,288	3,377	3,330
Pathology	936	933	917	913	958	903	943	929	1,031
Pharmacology	1,385	1,397	1,419	1,422	1,434	1,482	1,547	1,599	1,674
Physiology	1,396	1,487	1,510	1,489	1,488	1,476	1,515	1,538	1,530
Zoology	2,237	2,133	1,981	1,945	1,980	1,905	1,949	1,891	2,022
Biosciences, n.e.c.	813	903	917	981	949	1,078	1,157	1,163	1,480
Psychology	16,899	17,004	17,337	17,330	17,361	17,971	18,047	18,498	19,148
Social sciences	39,640	39,178	38,631	38,843	39,305	39,882	42,327	44,401	46,995
Agricultural economics	2,146	2,108	2,100	2,107	2,073	2,101	2,116	2,117	2,198
Anthropology	3,817	3,853	3,868	3,938	3,975	4,059	4,265	4,473	4,664
Economics (except agricultural)	7,467	7,211	7,102	7,121	7,020	7,061	7,124	7,214	7,684
Geography	2,397	2,368	2,298	2,389	2,486	2,406	2,633	2,681	2,924
History and philosophy of science	141	153	138	134	134	149	182	206	214
Linguistics	1,886	1,887	1,732	1,783	1,833	1,825	1,890	1,980	2,058
Political science	12,008	12,028	12,026	12,349	12,360	12,626	13,693	14,459	15,448
Sociology	4,469	4,356	4,236	4,183	4,559	4,659	4,862	5,054	5,440
Sociology/anthropology	553	553	535	571	572	638	673	775	590
Social sciences, n.e.c.	4,756	4,661	4,596	4,268	4,293	4,358	4,889	5,442	5,777
Total, health fields	26,455	27,478	27,402	28,809	29,506	30,523	31,504	30,159	37,702
Dentistry	541	604	563	689	809	833	748	740	805
Neurology	149	183	204	237	295	373	411	424	519
Nursing	11,021	11,567	10,613	11,278	11,348	11,578	11,206	9,060	14,648
Pharmaceutical sciences	1,790	1,797	1,859	1,908	1,880	1,949	2,177	2,009	2,286
Preventive medicine/community health	3,969	4,030	4,297	4,294	4,581	4,764	4,874	5,553	5,705
Speech pathology/audiology	4,746	4,767	4,806	5,017	4,509	4,832	5,010	5,189	5,696
Veterinary sciences	401	481	551	548	646	663	718	821	821
Clinical medicine, n.e.c.	963	961	1,109	1,056	1,089	1,141	1,115	1,104	1,227
Health related, n.e.c.	2,875	3,088	3,400	3,782	4,349	4,390	5,245	5,259	5,995

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates In Science and Engineering

Table C-13. Science and engineering graduate students in private doctorate-granting institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields .....	110,210	109,621	114,522	116,547	116,577	117,482	116,380	116,689	123,162
Total, science/engineering fields .....	99,522	98,517	103,156	105,262	106,159	106,834	105,628	105,543	110,291
Engineering, total .....	31,122	31,705	32,427	33,777	32,379	31,489	29,899	29,365	30,477
Aerospace .....	660	639	687	736	758	852	881	886	840
Agricultural .....	53	54	53	51	48	45	50	46	40
Biomedical .....	523	564	580	578	609	641	694	836	909
Chemical .....	2,409	2,327	2,232	2,140	2,162	2,015	1,896	1,856	1,916
Civil .....	4,347	4,294	4,095	4,108	3,364	3,347	3,338	3,485	3,917
Electrical .....	10,506	10,902	11,048	11,235	11,087	11,378	11,190	10,789	10,936
Engineering science .....	618	680	709	841	840	904	813	779	767
Industrial .....	4,328	4,176	4,719	5,275	5,673	4,744	3,663	3,341	3,599
Mechanical .....	3,948	4,263	4,108	4,461	4,387	4,375	4,397	4,284	4,442
Metallurgical/materials .....	1,358	1,396	1,508	1,574	1,618	1,636	1,666	1,690	1,628
Mining .....	68	68	65	70	70	68	60	76	130
Nuclear .....	240	223	211	207	204	211	216	205	189
Petroleum .....	273	248	215	155	186	157	134	131	135
Engineering, n.e.c. ....	1,791	1,871	2,197	2,346	1,373	1,116	901	959	1,029
Sciences, total .....	68,400	66,812	70,729	71,485	73,780	75,345	75,729	76,178	79,814
Physical sciences .....	8,089	8,299	8,628	8,751	8,848	8,848	9,083	9,110	9,383
Astronomy .....	199	206	229	220	230	236	273	274	283
Chemistry .....	4,592	4,655	4,878	4,935	4,924	4,833	4,946	5,029	5,250
Physics .....	3,298	3,438	3,497	3,552	3,623	3,739	3,843	3,766	3,822
Physical sciences, n.e.c. ....	0	0	24	44	71	40	21	21	28
Earth, atmospheric, & ocean sciences .....	2,445	2,423	2,443	2,338	2,236	2,175	2,199	2,195	2,336
Atmospheric sciences .....	53	51	58	58	60	53	29	28	20
Geosciences .....	1,765	1,785	1,733	1,643	1,510	1,452	1,435	1,378	1,346
Oceanography .....	304	322	374	351	318	276	337	342	367
Earth, atmos., & ocean sci., n.e.c. ....	323	265	278	286	348	394	398	447	603
Mathematical sciences .....	4,849	4,561	4,356	4,110	4,025	4,087	4,059	3,887	4,074
Computer sciences .....	6,839	7,920	9,932	10,682	11,503	11,660	11,080	11,285	11,102
Agricultural sciences .....	408	390	403	397	394	409	393	443	477
Biological sciences .....	10,775	10,815	11,054	11,307	11,531	11,742	12,083	12,436	13,175
Anatomy .....	343	340	338	337	354	342	328	285	286
Biochemistry .....	1,317	1,415	1,424	1,465	1,501	1,508	1,595	1,541	1,630
Biology .....	3,249	3,258	3,141	3,218	3,121	3,119	3,200	3,248	3,239
Biometry/epidemiology .....	515	347	642	606	703	712	705	789	799
Biophysics .....	205	213	181	230	235	249	273	286	310
Botany .....	160	128	133	147	157	161	162	167	168
Cell biology .....	561	551	687	807	901	901	974	1,071	1,217
Ecology .....	57	59	49	51	50	79	98	97	134
Entomology/parasitology .....	49	55	52	50	67	62	66	68	69
Genetics .....	273	295	296	318	325	338	385	368	420
Microbiology .....	1,014	1,061	1,033	1,036	1,055	1,118	1,178	1,197	1,336
Nutrition .....	873	866	870	804	757	711	629	584	589
Pathology .....	470	477	382	405	384	423	407	407	415
Pharmacology .....	678	648	686	656	642	649	723	698	762
Physiology .....	598	673	701	731	725	744	691	738	799
Zoology .....	153	133	122	120	117	117	126	134	151
Biosciences, n.e.c. ....	260	296	317	326	437	509	543	760	851
Psychology .....	13,026	12,942	13,048	13,189	13,648	14,416	15,345	15,746	17,210
Social sciences .....	21,969	19,462	20,865	20,711	21,595	22,008	21,487	21,076	22,057
Agricultural economics .....	91	104	100	77	79	108	111	115	115
Anthropology .....	1,582	1,518	1,540	1,654	1,508	1,651	1,651	1,742	1,746
Economics (except agricultural) .....	4,450	4,209	4,217	4,036	4,104	4,142	4,159	4,208	4,222
Geography .....	218	209	217	182	185	195	186	187	199
History and philosophy of science .....	112	121	134	132	160	139	160	163	169
Linguistics .....	927	1,033	1,072	1,036	1,087	1,056	1,029	975	1,044
Political science .....	10,208	8,102	9,219	9,258	9,867	9,616	9,472	8,758	9,627
Sociology .....	1,893	1,754	1,758	1,653	1,749	1,767	1,766	1,823	1,783
Sociology/anthropology .....	461	407	371	333	310	274	273	321	363
Social sciences, n.e.c. ....	2,027	2,005	2,237	2,350	2,546	3,060	2,680	2,784	2,789
Total, health fields .....	10,638	11,104	11,366	11,285	10,418	10,648	10,752	11,146	12,871
Dentistry .....	235	250	273	240	240	245	250	201	225
Neurology .....	98	120	119	135	177	213	312	358	462
Nursing .....	3,965	4,346	4,456	4,004	3,401	2,900	2,792	2,867	3,992
Pharmaceutical sciences .....	835	703	674	764	722	660	732	779	865
Preventive medicine/community health .....	2,523	2,627	2,804	2,749	2,714	2,773	2,676	2,526	2,616
Speech pathology/audiology .....	1,091	1,005	1,178	1,013	933	1,094	1,138	1,086	1,193
Veterinary sciences .....	39	50	59	59	65	72	64	60	54
Clinical medicine, n.e.c. ....	319	332	371	364	414	439	480	511	665
Health related, n.e.c. ....	1,583	1,671	1,432	1,957	1,752	2,252	2,308	2,758	2,799

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates In Science and Engineering

**Table C-14. Science and engineering graduate students in doctorate-granting institutions, by enrollment status and citizenship, and racial/ethnic background of U.S. citizens: 1983-91**

Page 1 of 1

Enrollment status, citizenship, and racial/ethnic background	1983	1984	1985	1986	1987	1988	1989	1990	1991
<b>Total enrollment</b>	<b>341,360</b>	<b>344,655</b>	<b>353,696</b>	<b>364,234</b>	<b>368,358</b>	<b>373,909</b>	<b>379,521</b>	<b>384,911</b>	<b>411,296</b>
Total U.S. citizens	272,502	274,014	278,260	281,611	280,987	281,291	282,745	285,041	304,444
Black, non-Hispanic	9,579	9,316	9,338	9,273	9,344	10,210	10,508	11,046	12,343
American Indian/Alaskan Native	877	837	734	731	765	900	896	1,054	1,207
Asian/Pacific Islander	8,575	9,365	11,146	12,006	13,563	14,169	14,394	15,779	16,917
Hispanic	8,561	8,408	8,790	8,984	9,095	9,371	9,669	10,146	11,328
White, non-Hispanic	226,132	225,079	226,196	231,408	230,933	231,795	232,166	235,161	248,250
Other or unknown	18,778	21,009	22,056	19,209	17,287	14,846	15,112	11,855	14,399
Non-U.S. citizens	68,858	70,641	75,436	82,623	87,371	92,618	96,776	99,870	106,852
<b>Full-time enrollment</b>	<b>235,166</b>	<b>236,554</b>	<b>240,386</b>	<b>249,098</b>	<b>253,187</b>	<b>258,318</b>	<b>265,186</b>	<b>268,864</b>	<b>286,756</b>
Total U.S. citizens	175,867	175,833	174,831	176,819	177,368	177,593	181,330	182,213	194,839
Black, non-Hispanic	5,289	5,214	5,308	5,241	5,322	5,822	6,306	6,553	7,408
American Indian/Alaskan Native	576	559	496	510	529	595	598	693	759
Asian/Pacific Islander	5,650	8,383	7,255	8,014	9,148	9,574	9,882	10,713	11,568
Hispanic	5,305	5,351	5,692	5,827	5,801	6,066	6,446	6,861	7,695
White, non-Hispanic	149,119	147,916	145,019	148,324	147,516	148,311	150,298	151,747	159,956
Other or unknown	9,928	10,410	11,061	8,903	9,052	7,225	7,800	5,646	7,455
Non-U.S. citizens	59,299	60,721	65,555	72,279	75,819	80,725	83,858	86,651	91,917
<b>Part-time enrollment</b>	<b>106,194</b>	<b>108,101</b>	<b>113,310</b>	<b>115,136</b>	<b>115,171</b>	<b>115,591</b>	<b>114,333</b>	<b>116,047</b>	<b>124,540</b>
Total U.S. citizens	96,635	98,181	103,429	104,792	103,619	103,698	101,415	102,828	109,805
Black, non-Hispanic	4,290	4,102	4,030	4,032	4,022	4,388	4,202	4,493	4,935
American Indian/Alaskan Native	301	278	238	221	236	305	298	361	448
Asian/Pacific Islander	2,925	2,982	3,891	3,992	4,415	4,595	4,512	5,066	5,351
Hispanic	3,256	3,057	3,098	3,157	3,294	3,305	3,223	3,285	3,633
White, non-Hispanic	77,013	77,163	81,177	83,084	83,417	83,484	81,868	83,414	88,294
Other or unknown	8,850	10,599	10,995	10,306	8,235	7,621	7,312	6,209	6,944
Non-U.S. citizens	9,559	9,920	9,881	10,344	11,552	11,893	12,918	13,219	14,935

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



**Table C-15. Science and engineering graduate students in doctorate-granting institutions, by field and citizenship, and racial/ethnic background of U.S. citizens: 1983-91**

Page 1 of 3

Field, citizenship, and racial/ethnic background	1983	1984	1985	1986	1987	1988	1989	1990	1991
<b>Total, all surveyed fields</b>	<b>341,380</b>	<b>344,655</b>	<b>353,696</b>	<b>364,234</b>	<b>368,358</b>	<b>373,909</b>	<b>379,521</b>	<b>384,911</b>	<b>411,296</b>
Total U.S. citizens	272,502	274,014	278,260	281,611	280,987	281,291	282,745	285,041	304,444
Black, non-Hispanic	9,579	9,316	9,338	9,273	9,344	10,210	10,508	11,046	12,343
American Indian/Alaskan Native	877	837	734	731	765	900	896	1,054	1,207
Asian/Pacific Islander	8,575	9,365	11,146	12,006	13,563	14,169	14,394	15,779	16,917
Hispanic	8,561	8,408	8,790	8,984	9,095	9,371	9,669	10,146	11,328
White, non-Hispanic	226,132	225,079	226,196	231,408	230,933	231,795	232,166	235,161	248,250
Other or unknown	18,778	21,009	22,056	19,209	17,287	14,846	15,112	11,855	14,399
Non-U.S. citizens	68,858	70,641	75,436	82,623	87,371	92,618	96,776	99,870	106,852
<b>Sciences, total</b>	<b>219,734</b>	<b>219,837</b>	<b>225,497</b>	<b>229,299</b>	<b>232,220</b>	<b>236,615</b>	<b>240,883</b>	<b>245,251</b>	<b>255,631</b>
Total U.S. citizens	179,896	178,458	180,647	180,507	180,190	181,382	182,786	185,445	192,647
Black, non-Hispanic	6,941	6,511	6,579	6,450	6,529	7,079	7,255	7,665	8,255
American Indian/Alaskan Native	572	534	509	495	524	623	622	756	834
Asian/Pacific Islander	4,894	5,247	6,027	6,468	7,435	7,891	8,022	8,681	9,045
Hispanic	6,074	5,869	6,138	6,112	6,048	6,208	6,571	6,886	7,448
White, non-Hispanic	151,549	148,679	149,533	150,708	150,502	152,144	152,895	155,618	159,683
Other or unknown	9,866	11,618	11,861	10,274	9,152	7,437	7,421	5,839	7,382
Non-U.S. citizens	39,838	41,379	44,850	48,792	52,030	55,233	58,097	59,806	62,984
<b>Physical sciences</b>	<b>27,747</b>	<b>28,410</b>	<b>29,312</b>	<b>30,543</b>	<b>30,967</b>	<b>31,212</b>	<b>31,806</b>	<b>31,851</b>	<b>32,938</b>
Total U.S. citizens	20,375	20,618	20,690	20,826	20,687	20,470	20,400	19,995	20,630
Black, non-Hispanic	427	456	388	383	398	437	482	497	531
American Indian/Alaskan Native	37	70	31	42	42	43	42	59	59
Asian/Pacific Islander	641	787	837	822	936	1,103	996	1,053	1,217
Hispanic	539	507	564	587	547	572	624	581	604
White, non-Hispanic	17,841	17,631	17,369	17,654	17,186	17,382	17,391	17,285	17,544
Other or unknown	1,090	1,167	1,501	1,338	1,578	933	865	520	675
Non-U.S. citizens	7,372	7,792	8,622	9,717	10,280	10,742	11,406	11,856	12,308
<b>Earth, atmospheric, &amp; ocean sciences</b>	<b>14,327</b>	<b>14,329</b>	<b>14,263</b>	<b>14,036</b>	<b>13,368</b>	<b>12,909</b>	<b>12,702</b>	<b>12,840</b>	<b>13,224</b>
Total U.S. citizens	12,517	12,591	12,449	11,985	11,202	10,530	10,154	10,251	10,418
Black, non-Hispanic	102	108	117	92	87	101	83	103	113
American Indian/Alaskan Native	25	21	24	20	17	25	26	31	27
Asian/Pacific Islander	207	157	168	128	159	183	185	224	214
Hispanic	200	241	192	197	212	198	198	219	224
White, non-Hispanic	11,383	10,984	10,936	10,852	10,200	9,666	9,337	9,429	9,527
Other or unknown	600	1,080	1,012	696	527	357	325	245	313
Non-U.S. citizens	1,810	1,738	1,814	2,051	2,166	2,379	2,548	2,589	2,806
<b>Mathematical sciences</b>	<b>14,846</b>	<b>15,029</b>	<b>15,218</b>	<b>15,616</b>	<b>16,122</b>	<b>16,757</b>	<b>16,804</b>	<b>17,113</b>	<b>17,526</b>
Total U.S. citizens	10,233	10,139	10,134	10,143	10,331	10,626	10,442	10,908	11,283
Black, non-Hispanic	275	255	266	303	306	283	305	354	365
American Indian/Alaskan Native	20	15	14	22	40	25	25	14	16
Asian/Pacific Islander	424	420	496	586	645	605	548	633	691
Hispanic	295	250	231	240	234	289	267	308	287
White, non-Hispanic	8,550	8,383	8,297	8,157	8,239	8,676	8,535	8,966	9,076
Other or unknown	669	816	830	835	867	748	762	631	838
Non-U.S. citizens	4,613	4,890	5,084	5,473	5,791	6,131	6,362	6,205	6,243
<b>Computer sciences</b>	<b>18,306</b>	<b>20,366</b>	<b>23,823</b>	<b>25,176</b>	<b>26,083</b>	<b>26,711</b>	<b>26,481</b>	<b>27,547</b>	<b>27,693</b>
Total U.S. citizens	13,552	14,830	17,391	18,275	18,546	18,870	18,057	18,365	17,970
Black, non-Hispanic	371	377	457	506	591	637	657	689	765
American Indian/Alaskan Native	13	43	50	12	16	30	33	30	32
Asian/Pacific Islander	808	890	1,376	1,509	1,837	2,058	1,982	2,161	2,111
Hispanic	194	208	381	347	436	403	449	473	510
White, non-Hispanic	10,202	10,889	12,689	13,532	14,108	14,523	13,718	14,040	13,360
Other or unknown	1,964	2,423	2,438	2,369	1,558	1,219	1,218	972	1,192
Non-U.S. citizens	4,754	5,536	6,432	6,901	7,537	7,841	8,424	9,182	9,723
<b>Agricultural sciences</b>	<b>11,644</b>	<b>11,446</b>	<b>10,799</b>	<b>10,779</b>	<b>10,430</b>	<b>10,396</b>	<b>10,443</b>	<b>10,539</b>	<b>10,747</b>
Total U.S. citizens	9,038	8,915	8,252	8,083	7,617	7,571	7,635	7,489	7,662
Black, non-Hispanic	116	118	117	98	114	124	131	114	109
American Indian/Alaskan Native	27	22	16	16	21	22	22	17	24
Asian/Pacific Islander	117	127	116	117	157	198	216	214	199
Hispanic	201	227	286	275	200	234	262	239	238
White, non-Hispanic	8,257	8,250	7,364	7,321	6,955	6,822	6,804	6,757	6,948
Other or unknown	320	171	333	256	170	171	200	148	144
Non-U.S. citizens	2,606	2,531	2,547	2,696	2,813	2,825	2,808	3,050	3,085

See explanatory information, if any, and SOURCE(S) at end of table.

**Table C-15. Science and engineering graduate students in doctorate-granting institutions, by field and citizenship, and racial/ethnic background of U.S. citizens: 1983-91**

Page 2 of 3

Field, citizenship, and racial/ethnic background	1983	1984	1985	1986	1987	1988	1989	1990	1991
<b>Biological sciences</b>	<b>41,330</b>	<b>41,671</b>	<b>42,201</b>	<b>43,076</b>	<b>43,341</b>	<b>44,353</b>	<b>45,441</b>	<b>45,640</b>	<b>48,093</b>
Total U.S. citizens	35,584	35,643	35,571	35,520	34,875	34,888	34,917	34,687	35,949
Black, non-Hispanic	815	833	865	846	810	922	965	985	1,055
American Indian/Alaskan Native	94	70	75	95	81	97	75	130	182
Asian/Pacific Islander	1,147	1,216	1,340	1,486	1,569	1,707	1,856	2,092	2,225
Hispanic	764	755	830	862	931	1,001	1,091	1,076	1,222
White, non-Hispanic	31,612	31,861	31,246	31,120	30,233	30,338	29,913	29,617	30,401
Other or unknown	1,152	908	1,215	1,111	1,251	803	1,017	787	864
Non-U.S. citizens	5,746	6,028	6,630	7,556	8,466	9,465	10,524	10,953	12,144
<b>Psychology</b>	<b>29,925</b>	<b>29,946</b>	<b>30,385</b>	<b>30,519</b>	<b>31,009</b>	<b>32,387</b>	<b>33,392</b>	<b>34,244</b>	<b>36,358</b>
Total U.S. citizens	28,738	28,745	29,097	29,225	29,702	30,943	31,927	32,652	34,808
Black, non-Hispanic	1,284	1,308	1,189	1,196	1,208	1,297	1,309	1,393	1,543
American Indian/Alaskan Native	90	82	93	94	106	123	136	180	188
Asian/Pacific Islander	382	408	436	486	600	622	668	768	794
Hispanic	1,278	1,356	1,376	1,455	1,358	1,407	1,389	1,682	1,922
White, non-Hispanic	24,214	23,595	24,010	24,430	25,469	26,351	27,322	27,860	29,006
Other or unknown	1,490	1,996	1,988	1,564	961	1,143	1,103	769	1,155
Non-U.S. citizens	1,187	1,201	1,288	1,294	1,307	1,444	1,465	1,592	1,750
<b>Social sciences</b>	<b>61,609</b>	<b>58,640</b>	<b>59,496</b>	<b>59,554</b>	<b>60,900</b>	<b>61,890</b>	<b>63,814</b>	<b>65,477</b>	<b>69,052</b>
Total U.S. citizens	49,859	46,977	47,063	46,450	47,230	47,504	49,254	51,098	54,127
Black, non-Hispanic	3,551	3,056	3,180	3,026	3,015	3,278	3,323	3,530	3,774
American Indian/Alaskan Native	266	211	201	194	201	258	263	295	306
Asian/Pacific Islander	1,168	1,242	1,258	1,334	1,532	1,415	1,571	1,536	1,594
Hispanic	2,603	2,325	2,278	2,149	2,130	2,104	2,291	2,308	2,431
White, non-Hispanic	39,690	37,086	37,602	37,642	38,112	38,386	39,875	41,862	43,821
Other or unknown	2,581	3,057	2,544	2,105	2,240	2,063	1,931	1,767	2,201
Non-U.S. citizens	11,750	11,663	12,433	13,104	13,670	14,386	14,560	14,379	14,925
<b>Engineering, total</b>	<b>84,483</b>	<b>86,236</b>	<b>89,431</b>	<b>94,841</b>	<b>96,214</b>	<b>96,123</b>	<b>96,382</b>	<b>98,355</b>	<b>105,092</b>
Total U.S. citizens	58,211	59,606	61,817	64,168	64,077	62,192	61,475	62,278	65,677
Black, non-Hispanic	1,185	1,280	1,217	1,271	1,265	1,312	1,414	1,514	1,743
American Indian/Alaskan Native	156	176	112	122	107	126	110	137	162
Asian/Pacific Islander	2,819	3,259	4,265	4,584	5,153	5,173	5,181	5,705	6,130
Hispanic	1,279	1,350	1,320	1,496	1,586	1,566	1,549	1,682	1,926
White, non-Hispanic	44,870	45,655	46,557	49,326	49,798	48,471	47,243	48,175	50,066
Other or unknown	7,902	7,886	8,346	7,369	6,168	5,544	5,978	5,065	5,650
Non-U.S. citizens	26,272	26,630	27,614	30,673	32,137	33,931	34,907	36,077	39,415
<b>Chemical engineering</b>	<b>7,352</b>	<b>7,196</b>	<b>7,015</b>	<b>6,891</b>	<b>6,905</b>	<b>6,532</b>	<b>6,361</b>	<b>6,559</b>	<b>7,000</b>
Total U.S. citizens	4,888	4,880	4,623	4,555	4,494	4,016	3,606	3,693	3,892
Black, non-Hispanic	80	69	68	82	85	83	78	81	112
American Indian/Alaskan Native	11	9	8	5	28	24	10	5	22
Asian/Pacific Islander	292	321	262	280	347	308	241	323	420
Hispanic	81	132	101	110	109	132	108	139	155
White, non-Hispanic	4,134	4,004	3,785	3,821	3,710	3,326	3,041	3,061	3,087
Other or unknown	290	345	399	257	217	143	128	84	96
Non-U.S. citizens	2,464	2,316	2,392	2,336	2,411	2,516	2,755	2,866	3,108
<b>Civil engineering</b>	<b>14,036</b>	<b>14,371</b>	<b>14,089</b>	<b>14,102</b>	<b>13,625</b>	<b>13,896</b>	<b>13,927</b>	<b>14,336</b>	<b>15,985</b>
Total U.S. citizens	9,016	9,277	8,843	8,610	8,198	8,256	8,322	8,681	9,744
Black, non-Hispanic	145	175	171	161	148	158	211	193	252
American Indian/Alaskan Native	21	18	15	27	7	16	19	32	31
Asian/Pacific Islander	378	370	385	397	521	528	518	649	702
Hispanic	234	239	204	232	231	233	241	269	347
White, non-Hispanic	7,149	7,254	6,956	6,897	6,678	6,866	6,821	7,051	7,916
Other or unknown	1,089	1,221	1,112	896	613	445	512	487	496
Non-U.S. citizens	5,020	5,094	5,246	5,492	5,427	5,640	5,605	5,655	6,241
<b>Electrical engineering</b>	<b>23,448</b>	<b>24,491</b>	<b>26,273</b>	<b>27,731</b>	<b>28,903</b>	<b>29,655</b>	<b>30,107</b>	<b>30,205</b>	<b>31,780</b>
Total U.S. citizens	16,126	17,249	18,262	18,880	19,264	19,857	19,818	19,437	19,834
Black, non-Hispanic	305	353	399	357	372	433	473	497	561
American Indian/Alaskan Native	39	40	26	39	12	33	34	44	35
Asian/Pacific Islander	954	1,272	1,789	1,881	2,162	2,253	2,310	2,551	2,588
Hispanic	354	385	408	439	481	471	493	492	571
White, non-Hispanic	11,246	11,720	12,569	13,029	13,867	14,224	14,244	13,932	13,941
Other or unknown	3,228	3,479	3,071	2,935	2,370	2,443	2,264	1,921	2,138
Non-U.S. citizens	7,322	7,242	8,011	9,051	9,639	9,798	10,289	10,768	11,946

See explanatory information, if any, and SOURCE(S) at end of table.

**Table C-15. Science and engineering graduate students in doctorate-granting institutions, by field and citizenship, and racial/ethnic background of U.S. citizens: 1983-91**

Page 3 of 3

Field, citizenship, and racial/ethnic background	1983	1984	1985	1986	1987	1988	1989	1990	1991
Industrial engineering .....	8,546	8,655	9,847	10,836	11,454	10,701	10,223	10,119	11,773
Total U.S. citizens .....	6,919	6,881	7,949	8,723	8,903	8,095	7,430	7,176	8,195
Black, non-Hispanic .....	274	278	207	258	256	253	233	254	322
American Indian/Alaskan Native .....	14	27	11	10	22	13	14	22	27
Asian/Pacific Islander .....	194	216	300	378	415	439	405	398	521
Hispanic .....	212	274	241	270	275	273	236	216	244
White, non-Hispanic .....	5,745	5,515	6,532	6,859	7,287	6,576	5,900	5,562	6,177
Other or unknown .....	480	571	658	948	648	541	642	724	904
Non-U.S. citizens .....	1,627	1,774	1,898	2,113	2,551	2,606	2,793	2,943	3,578
Mechanical engineering .....	12,089	12,966	13,246	14,580	15,064	15,024	14,960	15,102	16,620
Total U.S. citizens .....	7,637	8,310	8,658	9,389	9,762	9,222	9,471	9,502	10,233
Black, non-Hispanic .....	117	154	141	144	166	170	171	211	216
American Indian/Alaskan Native .....	16	27	22	13	19	10	9	13	19
Asian/Pacific Islander .....	366	418	695	731	783	672	686	639	804
Hispanic .....	108	113	164	220	256	186	184	248	322
White, non-Hispanic .....	6,301	6,664	6,680	7,358	7,330	7,191	6,931	7,416	7,844
Other or unknown .....	729	934	956	923	1,208	993	1,490	977	1,028
Non-U.S. citizens .....	4,452	4,656	4,588	5,191	5,302	5,802	5,489	5,600	6,387
Other engineering .....	19,012	18,557	18,961	20,701	20,263	20,315	20,804	22,034	21,934
Total U.S. citizens .....	13,625	13,009	13,482	14,211	13,456	12,746	12,828	13,789	13,779
Black, non-Hispanic .....	264	251	231	269	238	205	248	278	280
American Indian/Alaskan Native .....	55	55	30	28	21	30	24	21	28
Asian/Pacific Islander .....	635	662	834	917	925	973	1,021	1,145	1,095
Hispanic .....	290	207	202	225	234	271	287	320	287
White, non-Hispanic .....	10,295	10,498	10,035	11,362	10,926	10,288	10,306	11,153	11,101
Other or unknown .....	2,086	1,336	2,150	1,410	1,112	979	942	872	988
Non-U.S. citizens .....	5,387	5,548	5,479	6,490	6,807	7,569	7,976	8,245	8,155
Total, health fields .....	37,143	38,582	38,768	40,094	39,924	41,171	42,256	41,305	50,573
Total U.S. citizens .....	34,395	35,950	35,796	36,936	36,720	37,717	38,484	37,318	46,120
Black, non-Hispanic .....	1,453	1,525	1,542	1,552	1,550	1,819	1,839	1,867	2,345
American Indian/Alaskan Native .....	149	127	113	114	134	151	164	161	211
Asian/Pacific Islander .....	862	859	854	954	975	1,105	1,191	1,393	1,742
Hispanic .....	1,208	1,189	1,332	1,376	1,461	1,597	1,549	1,578	1,954
White, non-Hispanic .....	29,713	30,745	30,106	31,374	30,633	31,180	32,028	31,368	38,501
Other or unknown .....	1,010	1,505	1,849	1,566	1,967	1,865	1,713	951	1,367
Non-U.S. citizens .....	2,748	2,632	2,972	3,158	3,204	3,454	3,772	3,987	4,453

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table C-16. Full-time science and engineering graduate students in doctorate-granting institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields	235,166	236,554	240,386	249,098	253,187	258,318	265,188	268,864	286,756
Total, science/engineering fields	214,768	215,923	219,726	228,225	232,019	236,395	241,996	246,012	259,484
Engineering, total	52,294	53,592	54,462	58,532	60,043	61,266	62,363	63,378	68,925
Aerospace	1,825	1,840	1,980	2,138	2,355	2,517	2,742	2,946	3,247
Agricultural	786	773	767	881	924	879	851	793	825
Biomedical	1,012	1,106	1,117	1,260	1,352	1,402	1,572	1,744	1,896
Chemical	5,790	5,656	5,494	5,542	5,578	5,330	5,245	5,354	5,733
Civil	9,533	9,853	9,518	9,704	9,380	9,629	9,643	9,793	10,836
Electrical	12,854	13,461	14,358	15,732	16,457	17,012	17,597	17,756	19,181
Engineering science	1,339	1,256	1,246	1,427	1,356	1,405	1,249	1,232	1,357
Industrial	3,130	3,271	3,342	3,704	4,045	4,176	4,492	4,476	5,422
Mechanical	8,178	8,511	8,683	9,587	9,955	10,186	10,185	10,337	11,371
Metallurgical/materials	2,686	2,863	3,075	3,340	3,409	3,441	3,687	3,898	4,034
Mining	404	403	371	419	406	379	312	306	325
Nuclear	1,052	1,018	1,030	1,059	1,044	1,105	1,112	1,080	1,080
Petroleum	607	602	551	551	619	570	494	457	514
Engineering, n.e.c.	3,118	2,979	2,930	3,168	3,163	3,235	3,182	3,206	3,104
Sciences, total	162,474	162,331	165,264	169,693	171,976	175,129	179,633	182,634	190,559
Physical sciences	24,502	25,147	25,938	27,069	27,652	27,778	28,428	28,344	29,364
Astronomy	585	596	635	654	681	705	762	790	810
Chemistry	14,495	14,615	15,067	15,537	15,735	15,582	15,810	15,645	16,289
Physics	9,361	9,800	10,103	10,753	11,078	11,373	11,761	11,812	12,156
Physical sciences, n.e.c.	61	136	133	125	158	118	95	97	107
Earth, atmospheric, & ocean sciences	11,516	11,284	10,890	10,886	10,097	9,844	9,721	9,830	9,880
Atmospheric sciences	778	770	867	854	822	825	803	828	857
Geosciences	7,908	7,797	7,350	7,110	6,411	6,060	5,788	5,575	5,472
Oceanography	1,547	1,518	1,520	1,652	1,603	1,576	1,745	1,796	1,834
Earth, atmos., & ocean sci., n.e.c.	1,283	1,199	1,153	1,270	1,261	1,383	1,385	1,631	1,717
Mathematical sciences	10,314	10,609	11,145	11,723	12,341	12,800	13,004	13,154	13,525
Computer sciences	9,276	10,108	12,374	13,389	13,639	13,695	14,063	14,689	14,583
Agricultural sciences	9,510	9,424	8,815	8,937	8,691	8,674	8,613	8,643	8,793
Biological sciences	34,987	35,442	35,479	36,363	36,959	37,993	39,133	38,901	41,282
Anatomy	921	936	891	893	924	973	999	907	956
Biochemistry	3,952	4,217	4,446	4,625	4,600	4,734	4,806	4,792	4,953
Biology	7,484	7,504	7,176	7,322	7,429	7,637	8,093	7,995	8,293
Biometry/epidemiology	877	751	996	1,048	1,190	1,236	1,236	1,253	1,446
Biophysics	437	419	381	449	468	544	610	572	645
Botany	2,884	2,839	2,895	2,724	2,556	2,520	2,423	2,171	2,229
Cell biology	1,138	1,209	1,406	1,655	1,886	2,023	2,177	2,359	2,711
Ecology	635	865	864	844	784	822	872	884	925
Entomology/parasitology	1,305	1,264	1,138	1,107	1,062	1,061	1,009	997	1,014
Genetics	919	942	1,014	1,129	1,167	1,146	1,211	1,181	1,375
Microbiology	3,880	3,803	3,867	3,853	3,998	4,296	4,320	4,275	4,400
Nutrition	2,882	2,895	2,816	2,928	2,892	2,758	2,737	2,820	2,857
Pathology	1,051	1,064	1,020	1,050	1,078	1,100	1,134	1,097	1,138
Pharmacology	1,931	1,925	1,993	1,958	1,927	1,992	2,140	2,154	2,308
Physiology	1,766	1,969	1,986	2,005	1,996	2,008	2,057	2,116	2,160
Zoology	2,025	1,844	1,699	1,708	1,775	1,708	1,766	1,612	1,765
Biosciences, n.e.c.	900	996	991	1,065	1,227	1,435	1,543	1,716	2,107
Psychology	22,122	21,572	21,291	21,897	22,375	23,314	24,240	24,655	26,052
Social sciences	40,247	38,745	39,332	39,429	40,222	41,031	42,431	44,418	47,080
Agricultural economics	1,994	1,975	1,946	1,915	1,823	1,878	1,885	1,934	1,968
Anthropology	3,866	3,900	3,805	4,006	4,015	4,199	4,336	4,704	4,928
Economics (except agricultural)	8,787	8,425	8,577	8,624	8,665	8,736	8,798	8,943	9,414
Geography	2,012	1,983	1,939	1,931	2,050	1,955	2,100	2,151	2,332
History and philosophy of science	229	243	227	237	267	266	303	340	340
Linguistics	2,316	2,264	2,303	2,307	2,388	2,438	2,389	2,456	2,546
Political science	11,798	11,024	11,528	11,805	11,611	11,866	12,503	12,934	14,250
Sociology	4,557	4,417	4,355	4,313	4,736	4,820	4,975	5,315	5,447
Sociology/anthropology	596	572	534	550	527	538	607	730	646
Social sciences, n.e.c.	4,092	3,942	4,118	3,741	4,140	4,335	4,535	4,911	5,209
Total, health fields	20,398	20,631	20,660	20,873	21,188	21,923	23,192	22,852	27,272
Dentistry	701	772	746	816	901	923	850	812	889
Neurology	244	299	321	369	470	583	708	770	968
Nursing	5,726	5,682	5,140	5,135	5,085	4,829	4,697	3,495	5,588
Pharmaceutical sciences	1,766	1,769	1,787	1,841	1,823	1,906	2,117	1,996	2,272
Preventive medicine/community health	3,926	3,915	4,086	4,036	4,093	4,181	4,180	4,447	4,446
Speech pathology/audiology	4,337	4,292	4,445	4,340	3,919	4,316	4,546	4,494	5,124
Veterinary sciences	337	402	491	486	575	589	649	698	706
Clinical medicine, n.e.c.	977	970	1,097	1,064	1,121	1,187	1,334	1,355	1,563
Health related, n.e.c.	2,384	2,530	2,547	2,786	3,181	3,409	4,111	4,785	5,716

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table C-17. Full-time science and engineering graduate students in doctorate-granting institutions, by geographic distribution: 1983-91**

Page 1 of 1

Division and State	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all institutions	235,166	236,554	240,386	249,098	253,187	258,318	265,186	268,864	286,756
New England	18,850	19,000	19,498	20,405	20,189	20,860	20,958	20,805	22,723
Connecticut	3,264	3,120	3,353	3,421	3,525	3,527	3,515	3,493	3,657
Maine	412	462	405	421	445	504	505	524	592
Massachusetts	12,657	12,823	13,186	13,885	13,437	14,087	14,083	13,890	15,438
New Hampshire	665	693	701	743	748	805	775	874	931
Rhode Island	1,426	1,478	1,434	1,524	1,625	1,491	1,609	1,532	1,611
Vermont	426	424	419	411	409	446	481	492	496
Middle Atlantic	35,403	36,498	36,991	38,560	39,118	40,051	41,023	40,629	42,786
New Jersey	3,974	4,442	4,653	4,964	5,458	5,415	5,621	5,211	5,463
New York	20,920	21,558	21,673	22,791	22,741	23,419	23,494	23,480	24,425
Pennsylvania	10,509	10,498	10,665	10,805	10,921	11,217	11,908	11,938	12,898
East North Central	45,081	44,219	45,349	46,926	49,151	50,561	52,453	52,504	56,016
Illinois	12,174	12,263	12,666	13,498	14,171	14,529	14,860	14,983	15,367
Indiana	5,872	5,931	5,869	6,114	6,483	6,650	7,284	7,527	7,832
Michigan	9,014	9,014	9,152	9,426	9,572	9,694	10,352	10,357	10,800
Ohio	12,195	11,117	11,803	12,030	12,948	13,527	13,586	13,271	15,288
Wisconsin	5,826	5,894	5,839	5,858	5,977	6,161	6,371	6,366	6,731
West North Central	17,755	17,504	17,084	17,464	17,530	17,915	17,934	18,323	19,353
Iowa	3,812	3,658	3,777	3,853	3,860	4,082	4,147	4,347	4,498
Kansas	3,484	3,120	2,399	2,437	2,455	2,570	2,584	2,624	2,705
Minnesota	4,168	4,433	4,600	4,661	4,560	4,720	4,771	4,736	4,909
Missouri	3,617	3,620	3,642	3,879	3,967	3,806	3,703	3,761	4,103
Nebraska	1,312	1,356	1,316	1,236	1,318	1,348	1,318	1,408	1,530
North Dakota	779	726	768	811	787	803	782	755	757
South Dakota	583	591	582	587	583	586	619	692	851
South Atlantic	31,542	32,115	33,109	34,761	35,118	36,846	37,928	39,543	42,380
Delaware	776	699	762	800	857	844	895	944	1,075
District of Columbia	2,975	2,980	3,384	3,388	3,425	3,628	3,394	3,563	3,789
Florida	5,840	6,027	6,364	6,450	6,230	6,804	7,138	7,258	8,009
Georgia	4,452	4,805	4,489	4,786	4,904	4,956	5,044	5,313	5,786
Maryland	3,742	3,610	3,752	4,094	4,134	4,479	4,823	5,032	5,288
North Carolina	5,792	5,798	5,803	6,263	6,255	6,627	6,923	7,114	7,391
South Carolina	2,045	2,031	2,096	2,277	2,282	2,228	2,408	2,405	2,786
Virginia	4,702	4,990	5,331	5,616	6,075	6,107	6,260	6,758	7,021
West Virginia	1,218	1,175	1,128	1,089	956	973	1,043	1,156	1,255
East South Central	8,595	8,942	9,160	9,576	9,881	10,281	10,989	10,361	11,552
Alabama	2,150	2,332	2,577	2,863	3,073	3,253	3,529	3,067	3,575
Kentucky	1,847	1,966	1,875	1,853	1,914	1,922	2,047	1,889	2,175
Mississippi	1,599	1,657	1,586	1,730	1,742	1,812	1,876	1,962	2,077
Tennessee	2,999	2,987	3,122	3,130	3,152	3,294	3,537	3,443	3,725
West South Central	22,077	22,711	22,168	22,779	22,623	22,509	23,521	24,214	26,059
Arkansas	839	825	783	786	715	678	729	810	839
Louisiana	3,126	3,502	3,547	3,480	3,564	3,439	3,528	3,719	4,229
Oklahoma	2,904	2,908	2,543	2,605	2,424	2,345	2,275	2,531	2,500
Texas	15,208	15,476	15,295	15,908	15,920	16,047	16,989	17,154	18,491
Mountain	16,709	16,355	16,387	17,255	17,822	17,792	17,531	18,262	19,894
Arizona	4,280	4,328	4,568	4,853	4,778	5,192	5,113	5,056	5,308
Colorado	4,981	4,764	4,771	5,219	5,655	5,424	5,053	5,724	6,052
Idaho	653	599	561	583	861	657	714	793	840
Montana	949	947	861	795	759	798	811	817	874
Nevada	390	432	438	420	503	460	558	469	718
New Mexico	1,784	1,740	1,806	1,917	2,078	1,944	1,868	2,048	2,163
Utah	2,878	2,889	2,860	2,984	2,820	2,768	2,784	2,781	3,148
Wyoming	794	656	522	484	568	549	630	574	791
Pacific	37,655	37,504	38,863	39,639	40,264	40,232	41,314	42,505	43,890
Alaska	325	345	212	302	223	224	348	326	329
California	29,241	28,781	30,045	30,555	31,414	31,234	32,248	33,142	33,791
Hawaii	1,502	1,460	1,467	1,570	1,527	1,522	1,539	1,655	1,767
Oregon	2,539	2,633	2,705	2,864	2,830	2,904	2,866	2,908	3,269
Washington	4,048	4,285	4,434	4,348	4,270	4,348	4,315	4,474	4,734
Outlying areas	1,499	1,706	1,777	1,733	1,491	1,471	1,537	1,718	2,103

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates In Science and Engineering



Table C-18. Full-time science and engineering graduate students in doctorate-granting institutions, by field and source of major support: 1983-91

Page 1 of 4

Field and source of major support	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields									
Total, all sources	235,166	236,554	240,386	249,098	253,187	258,318	265,188	268,864	286,756
Federal, total	46,691	46,693	47,798	50,191	52,222	54,285	56,193	56,730	61,810
Dept of Defense	6,870	7,020	7,214	7,834	8,684	9,411	9,110	8,643	9,083
Dept of HHS, total	14,720	14,821	15,343	15,992	16,699	17,510	18,119	18,116	20,137
NIH	10,665	10,876	11,024	11,810	12,807	13,639	14,368	14,644	15,923
Other HHS	4,025	3,945	4,319	4,182	3,892	3,871	3,751	3,472	4,214
NSF	9,464	9,798	10,146	10,804	11,203	11,593	11,828	11,885	12,538
USDA	NA	NA	2,130	2,312	2,625	2,557	2,690	2,647	3,002
All other Federal	15,637	15,054	12,965	13,249	13,011	13,214	14,446	15,439	17,050
Institutional support	93,665	97,480	99,877	105,021	107,918	110,626	114,795	115,993	120,563
Other outside support, total	24,062	24,111	25,929	25,988	24,618	24,927	25,234	25,211	26,561
All other U.S.	15,443	16,206	18,383	18,580	17,831	18,333	18,812	18,954	20,020
Foreign	8,619	7,905	7,546	7,408	6,787	6,594	6,422	6,257	6,541
Self-support	70,748	68,270	68,782	67,898	68,429	68,480	68,966	70,930	77,822
Sciences, total									
Total, all sources	162,474	162,331	165,264	169,693	171,976	175,129	179,633	182,634	190,559
Federal, total	29,262	29,671	30,948	32,231	33,365	34,492	36,073	36,684	39,276
Dept of Defense	2,632	2,975	3,185	3,500	3,882	4,236	3,912	3,654	3,769
Dept of HHS, total	10,030	10,239	10,587	11,206	11,862	12,618	13,275	13,497	14,546
NIH	9,018	9,379	9,500	10,200	10,832	11,695	12,199	12,381	13,271
Other HHS	1,012	860	1,087	1,006	1,030	923	1,076	1,116	1,275
NSF	6,762	7,072	7,425	7,639	7,683	7,746	8,029	7,989	8,240
USDA	NA	NA	1,945	2,076	2,321	2,329	2,434	2,365	2,662
All other Federal	9,838	9,385	7,806	7,810	7,617	7,563	8,423	9,179	10,059
Institutional support	73,095	75,448	76,592	79,665	81,440	83,665	86,080	87,120	89,304
Other outside support, total	14,567	13,999	14,838	14,447	13,708	13,918	14,036	13,754	14,567
All other U.S.	8,735	8,754	9,946	9,673	9,328	9,572	9,993	9,900	10,523
Foreign	5,832	5,245	4,892	4,774	4,380	4,346	4,043	3,854	4,036
Self-support	45,550	43,213	42,886	43,350	43,463	43,054	43,444	45,076	47,418
Physical sciences									
Total, all sources	24,502	25,147	25,938	27,069	27,652	27,778	28,428	28,344	29,364
Federal, total	8,050	8,551	8,723	9,434	9,616	9,748	10,126	10,066	10,715
Dept of Defense	827	997	1,013	1,147	1,273	1,465	1,379	1,194	1,223
Dept of HHS, total	1,507	1,592	1,763	1,992	2,071	2,122	2,089	2,043	2,024
NIH	1,409	1,471	1,602	1,827	1,908	1,973	1,960	1,916	1,856
Other HHS	98	121	161	165	163	149	129	127	168
NSF	3,210	3,393	3,500	3,661	3,574	3,642	3,592	3,529	3,560
USDA	NA	NA	34	31	44	32	43	53	60
All other Federal	2,506	2,569	2,413	2,603	2,654	2,487	3,023	3,247	3,848
Institutional support	13,166	13,281	13,536	14,013	14,408	14,417	14,739	14,592	14,676
Other outside support, total	1,688	1,791	2,046	1,907	1,833	1,962	1,992	1,933	2,196
All other U.S.	1,225	1,355	1,617	1,566	1,561	1,651	1,740	1,682	1,868
Foreign	463	436	429	341	272	311	252	251	308
Self-support	1,598	1,524	1,633	1,715	1,795	1,651	1,571	1,753	1,777
Earth, atmospheric, & ocean sciences									
Total, all sources	11,516	11,284	10,890	10,886	10,097	9,844	9,721	9,830	9,880
Federal, total	2,834	2,815	2,933	3,014	2,855	2,782	2,885	2,932	3,047
Dept of Defense	363	372	415	452	497	457	435	434	430
Dept of HHS, total	32	38	39	37	56	51	25	34	55
NIH	9	27	24	23	22	19	17	21	22
Other HHS	23	11	15	14	34	32	8	13	33
NSF	1,315	1,332	1,372	1,356	1,260	1,236	1,247	1,177	1,191
USDA	NA	NA	34	18	33	45	42	63	74
All other Federal	1,124	1,073	1,073	1,151	1,009	993	1,136	1,224	1,297
Institutional support	4,081	4,184	3,985	4,202	4,043	4,158	4,110	4,062	4,114
Other outside support, total	1,256	1,219	1,371	1,159	983	1,001	972	938	969
All other U.S.	953	906	1,016	847	658	640	632	670	681
Foreign	303	313	355	312	325	361	340	268	288
Self-support	3,345	3,066	2,601	2,511	2,216	1,903	1,754	1,898	1,750
Mathematical sciences									
Total, all sources	10,314	10,609	11,145	11,723	12,341	12,800	13,004	13,154	13,525
Federal, total	747	755	930	992	1,083	1,168	1,188	1,295	1,452
Dept of Defense	305	303	385	429	435	511	394	366	370
Dept of HHS, total	41	26	21	24	30	28	36	49	69
NIH	28	22	18	19	24	25	28	39	64
Other HHS	13	4	3	5	6	3	8	10	5
NSF	222	277	321	357	435	463	470	490	446
USDA	NA	NA	13	18	16	20	22	23	21
All other Federal	179	149	190	164	167	146	266	367	546
Institutional support	7,118	7,385	7,749	8,166	8,502	8,777	9,010	9,086	9,126
Other outside support, total	507	626	543	587	536	609	585	555	594
All other U.S.	172	267	253	245	230	346	348	302	310
Foreign	335	359	290	342	306	263	237	253	284
Self-support	1,942	1,843	1,923	1,978	2,220	2,246	2,221	2,218	2,353

See explanatory information, if any, and SOURCE(S) at end of table.

**Table C-18. Full-time science and engineering graduate students in doctorate-granting institutions, by field and source of major support: 1983-91**

Page 2 of 4

Field and source of major support	1983	1984	1985	1986	1987	1988	1989	1990	1991
<b>Computer sciences</b>									
Total, all sources	9,276	10,108	12,374	13,389	13,639	13,695	14,063	14,689	14,583
Federal, total	1,045	1,215	1,568	1,818	2,022	2,167	2,289	2,374	2,490
Dept of Defense	441	611	840	1,014	1,114	1,205	1,158	1,127	1,112
Dept of HHS, total	29	25	21	45	62	64	60	68	71
NIH	26	24	20	43	61	64	53	61	65
Other HHS	3	1	1	2	1	0	7	7	6
NSF	384	431	502	527	623	633	779	818	905
USDA	NA	NA	4	3	17	10	7	14	7
All other Federal	191	148	201	229	206	255	285	347	395
Institutional support	3,073	3,486	4,084	4,315	4,750	4,873	5,042	5,220	4,960
Other outside support, total	689	705	1,261	1,424	1,115	1,139	1,186	1,200	1,298
All other U.S.	493	504	969	1,151	889	892	912	893	978
Foreign	196	201	292	273	226	247	274	307	320
Self-support	4,469	4,702	5,461	5,832	5,752	5,516	5,546	5,895	5,835
<b>Agricultural sciences</b>									
Total, all sources	9,510	9,424	8,815	8,937	8,691	8,674	8,613	8,643	8,793
Federal, total	1,531	1,357	1,519	1,618	1,680	1,721	1,748	1,696	1,787
Dept of Defense	15	17	28	17	30	32	13	18	30
Dept of HHS, total	23	16	15	12	28	31	28	36	35
NIH	17	15	15	11	21	30	17	31	27
Other HHS	6	1	0	1	7	1	11	5	8
NSF	64	68	95	70	59	50	47	62	62
USDA	NA	NA	675	889	931	947	1,049	916	1,062
All other Federal	1,429	1,256	706	630	632	661	611	664	598
Institutional support	3,629	3,879	3,422	3,570	3,512	3,385	3,370	3,358	3,457
Other outside support, total	2,126	1,978	1,872	1,760	1,613	1,592	1,633	1,717	1,679
All other U.S.	958	925	1,000	899	813	918	985	1,075	1,034
Foreign	1,168	1,053	872	861	800	774	648	642	645
Self-support	2,224	2,210	2,002	1,989	1,888	1,876	1,862	1,872	1,870
<b>Biological sciences</b>									
Total, all sources	34,987	35,442	35,479	36,363	36,959	37,993	39,133	38,901	41,282
Federal, total	10,101	10,301	10,577	11,005	11,723	12,360	13,109	13,264	14,326
Dept of Defense	242	239	218	188	247	281	248	214	235
Dept of HHS, total	7,043	7,205	7,369	7,859	8,305	8,887	9,566	9,689	10,580
NIH	6,733	6,982	7,012	7,495	7,972	8,620	9,216	9,325	10,085
Other HHS	310	223	357	364	333	267	350	364	495
NSF	1,041	1,065	1,065	1,072	1,123	1,108	1,238	1,194	1,263
USDA	NA	NA	804	805	942	962	930	949	1,052
All other Federal	1,775	1,792	1,121	1,081	1,106	1,122	1,127	1,218	1,196
Institutional support	15,767	16,260	16,251	16,894	17,000	17,294	17,864	17,759	18,560
Other outside support, total	3,120	3,043	3,215	3,013	3,108	3,399	3,439	3,478	3,712
All other U.S.	2,014	2,042	2,289	2,089	2,237	2,569	2,638	2,761	2,985
Foreign	1,106	1,001	926	924	871	830	801	717	727
Self-support	5,999	5,838	5,436	5,451	5,128	4,940	4,721	4,400	4,684
<b>Psychology</b>									
Total, all sources	22,122	21,572	21,291	21,897	22,375	23,314	24,240	24,655	26,052
Federal, total	1,980	1,942	1,954	1,891	1,924	2,031	2,084	2,341	2,559
Dept of Defense	135	133	117	132	154	143	116	136	149
Dept of HHS, total	1,004	1,024	1,048	941	996	1,118	1,170	1,265	1,338
NIH	584	629	615	582	619	757	707	779	885
Other HHS	420	395	433	359	377	361	463	486	453
NSF	190	206	235	231	246	232	233	260	267
USDA	NA	NA	13	9	18	25	29	34	32
All other Federal	651	579	541	578	510	513	536	646	773
Institutional support	8,764	9,198	9,486	9,887	9,692	10,219	10,561	10,762	11,132
Other outside support, total	1,316	1,325	1,324	1,334	1,214	1,009	1,086	1,050	1,028
All other U.S.	1,250	1,258	1,269	1,273	1,160	952	1,037	997	976
Foreign	66	67	55	61	54	57	49	53	52
Self-support	10,062	9,107	8,527	8,785	9,545	10,055	10,509	10,502	11,333
<b>Social sciences</b>									
Total, all sources	40,247	38,745	39,332	39,429	40,222	41,031	42,431	44,418	47,080
Federal, total	2,974	2,735	2,744	2,459	2,462	2,515	2,644	2,716	2,900
Dept of Defense	304	303	169	121	132	142	169	165	220
Dept of HHS, total	351	313	311	296	314	317	301	313	374
NIH	212	209	194	200	205	207	201	209	267
Other HHS	139	104	117	96	109	110	100	104	107
NSF	336	300	335	365	363	382	423	459	546
USDA	NA	NA	368	303	320	288	312	313	354
All other Federal	1,983	1,819	1,561	1,374	1,333	1,386	1,439	1,466	1,406
Institutional support	17,497	17,775	18,079	18,618	19,534	20,542	21,384	22,281	23,279
Other outside support, total	3,865	3,312	3,206	3,263	3,306	3,107	3,143	2,883	3,087
All other U.S.	1,670	1,497	1,533	1,603	1,780	1,604	1,701	1,520	1,675
Foreign	2,195	1,815	1,673	1,660	1,526	1,503	1,442	1,363	1,412
Self-support	15,911	14,923	15,303	15,089	14,921	14,837	15,260	16,538	17,214

See explanatory information, if any, and SOURCE(S) at end of table.

Table C-18. Full-time science and engineering graduate students in doctorate-granting institutions, by field and source of major support: 1983-91

Page 3 of 4

Field and source of major support	1983	1984	1985	1986	1987	1988	1989	1990	1991
<b>Engineering, total</b>									
Total, all sources	52,294	53,592	54,462	58,532	60,043	61,266	62,363	63,378	68,925
Federal, total	11,888	11,496	11,178	12,306	13,032	13,343	14,118	14,492	15,850
Dept of Defense	3,985	3,780	3,758	4,109	4,568	4,942	4,771	4,639	4,831
Dept of HHS, total	575	544	520	532	622	628	729	786	837
NIH	477	466	455	449	508	555	644	685	748
Other HHS	98	78	65	83	114	73	85	101	89
NSF	2,672	2,884	2,680	3,122	3,471	3,799	3,752	3,850	4,241
USDA	NA	NA	164	194	256	197	210	224	280
All other Federal	4,656	4,488	4,054	4,349	4,115	4,377	4,656	4,993	5,661
Institutional support	15,965	16,990	18,026	19,851	20,968	21,123	22,269	22,525	24,124
Other outside support, total	7,929	8,510	9,466	10,010	9,430	9,753	9,792	10,155	10,458
All other U.S.	5,616	6,345	7,336	7,899	7,530	7,895	7,893	8,209	8,410
Foreign	2,313	2,165	2,130	2,111	1,900	1,858	1,899	1,946	2,048
Self-support	16,512	16,598	15,794	16,365	16,613	16,447	16,184	16,206	18,493
<b>Chemical engineering</b>									
Total, all sources	5,790	5,656	5,494	5,542	5,578	5,330	5,245	5,354	5,733
Federal, total	1,361	1,314	1,289	1,394	1,486	1,452	1,457	1,512	1,592
Dept of Defense	99	92	90	101	150	145	130	96	134
Dept of HHS, total	53	67	53	69	71	83	87	121	132
NIH	41	60	52	67	63	79	87	119	128
Other HHS	12	7	1	2	8	4	0	2	4
NSF	802	606	622	652	686	683	652	673	663
USDA	NA	NA	9	6	24	7	13	27	16
All other Federal	607	549	515	566	555	534	575	595	647
Institutional support	2,037	2,020	2,007	2,032	2,027	2,010	1,965	2,069	2,233
Other outside support, total	1,222	1,319	1,329	1,286	1,297	1,276	1,271	1,212	1,235
All other U.S.	1,042	1,179	1,184	1,164	1,171	1,164	1,178	1,117	1,119
Foreign	189	140	145	124	126	112	93	95	116
Self-support	1,170	1,003	869	828	768	592	552	561	673
<b>Civil engineering</b>									
Total, all sources	9,533	9,853	9,518	9,704	9,380	9,629	9,643	9,793	10,836
Federal, total	1,325	1,340	1,295	1,362	1,423	1,501	1,395	1,443	1,717
Dept of Defense	166	222	254	248	275	322	277	232	272
Dept of HHS, total	26	8	18	28	12	5	18	15	32
NIH	16	8	9	18	8	3	16	11	28
Other HHS	10	0	9	10	4	2	2	4	4
NSF	371	371	356	390	482	419	382	424	491
USDA	NA	NA	6	23	37	37	33	25	51
All other Federal	762	739	661	673	637	718	685	737	871
Institutional support	2,833	2,953	3,132	3,527	3,574	3,803	3,836	3,811	4,130
Other outside support, total	1,300	1,320	1,287	1,226	1,053	1,074	1,150	1,229	1,314
All other U.S.	792	847	860	796	681	667	692	813	903
Foreign	508	473	427	430	372	407	458	416	411
Self-support	4,075	4,240	3,804	3,589	3,330	3,251	3,262	3,310	3,675
<b>Electrical engineering</b>									
Total, all sources	12,854	13,461	14,358	15,732	16,457	17,012	17,597	17,756	19,181
Federal, total	2,932	2,730	2,373	2,776	3,017	3,467	3,454	3,576	3,880
Dept of Defense	1,683	1,539	1,290	1,411	1,569	1,655	1,634	1,606	1,599
Dept of HHS, total	103	95	81	80	88	124	93	111	119
NIH	77	75	62	57	56	99	73	85	106
Other HHS	26	20	19	23	32	25	20	26	13
NSF	638	598	555	753	846	1,133	1,078	1,128	1,260
USDA	NA	NA	5	4	15	17	20	22	24
All other Federal	508	498	442	528	499	538	629	709	878
Institutional support	3,831	4,259	4,836	5,080	5,458	5,509	6,138	6,073	6,428
Other outside support, total	1,891	2,169	2,357	3,064	2,636	2,676	2,775	2,864	2,942
All other U.S.	1,427	1,666	1,816	2,493	2,132	2,291	2,312	2,361	2,392
Foreign	464	503	541	571	504	385	483	503	550
Self-support	4,200	4,303	4,792	4,812	5,346	5,360	5,230	5,243	5,931
<b>Industrial engineering</b>									
Total, all sources	3,130	3,271	3,342	3,704	4,045	4,176	4,492	4,476	5,422
Federal, total	416	401	384	375	466	557	584	606	693
Dept of Defense	142	129	184	148	211	281	287	308	291
Dept of HHS, total	50	49	45	45	44	39	59	60	52
NIH	31	25	30	14	23	22	25	27	16
Other HHS	19	24	15	31	21	17	34	33	36
NSF	40	55	40	78	97	115	125	128	168
USDA	NA	NA	1	1	1	2	0	1	5
All other Federal	184	168	114	103	113	120	113	109	157
Institutional support	1,008	1,094	1,181	1,293	1,446	1,433	1,611	1,643	1,845
Other outside support, total	308	367	413	440	446	488	507	541	480
All other U.S.	172	256	309	355	369	390	385	368	361
Foreign	136	111	104	85	77	98	122	153	119
Self-support	1,398	1,409	1,364	1,596	1,687	1,698	1,790	1,686	2,404

See explanatory information, if any, and SOURCE(S) at end of table.

Table C-18. Full-time science and engineering graduate students in doctorate-granting institutions, by field and source of major support: 1983-91

Page 4 of 4

Field and source of major support	1983	1984	1985	1986	1987	1988	1989	1990	1991
<b>Mechanical engineering</b>									
Total, all sources	8,178	8,511	8,683	9,587	9,955	10,186	10,185	10,337	11,371
Federal, total	1,558	1,633	1,888	2,042	2,258	2,413	2,461	2,482	2,732
Dept of Defense	392	379	538	633	770	809	827	735	761
Dept of HHS, total	73	64	89	61	84	70	61	69	71
NIH	65	58	72	52	67	85	54	68	58
Other HHS	8	6	17	9	17	5	7	1	13
NSF	347	384	435	477	591	651	632	630	731
USDA	NA	NA	19	10	15	16	28	26	29
All other Federal	746	806	807	861	798	857	913	1,022	1,140
Institutional support	2,824	3,060	3,070	3,632	3,783	3,709	3,787	3,836	4,173
Other outside support, total	1,157	1,250	1,585	1,483	1,458	1,506	1,507	1,553	1,654
All other U.S.	865	953	1,351	1,241	1,267	1,298	1,324	1,347	1,393
Foreign	292	297	244	242	189	208	183	206	261
Self-support	2,639	2,568	2,130	2,430	2,458	2,558	2,430	2,466	2,812
<b>Other engineering</b>									
Total, all sources	12,809	12,840	13,067	14,263	14,628	14,933	15,201	15,662	16,382
Federal, total	4,296	4,078	3,947	4,357	4,382	4,553	4,767	4,873	5,236
Dept of Defense	1,503	1,419	1,402	1,568	1,593	1,730	1,616	1,662	1,774
Dept of HHS, total	270	281	234	249	323	307	411	410	431
NIH	247	240	230	241	291	287	389	375	412
Other HHS	23	21	4	8	32	20	22	35	19
NSF	674	670	672	772	789	788	883	867	908
USDA	NA	NA	124	150	164	118	116	113	155
All other Federal	1,849	1,728	1,515	1,618	1,513	1,610	1,741	1,821	1,968
Institutional support	3,432	3,604	3,800	4,287	4,680	4,659	4,932	5,093	5,315
Other outside support, total	2,051	2,085	2,485	2,509	2,542	2,733	2,582	2,756	2,833
All other U.S.	1,318	1,444	1,816	1,850	1,910	2,085	2,002	2,183	2,242
Foreign	733	641	669	659	632	648	560	573	591
Self-support	3,030	3,073	2,835	3,110	3,024	2,988	2,920	2,940	2,998
<b>Total, health fields</b>									
Total, all sources	20,398	20,631	20,660	20,873	21,168	21,923	23,192	22,852	27,272
Federal, total	5,541	5,526	5,674	5,654	5,825	5,850	6,002	5,554	6,684
Dept of Defense	253	265	271	225	234	233	427	350	483
Dept of HHS, total	4,115	4,038	4,236	4,254	4,215	4,264	4,115	3,833	4,754
NIH	1,200	1,031	1,069	1,161	1,467	1,389	1,525	1,578	1,904
Other HHS	2,915	3,007	3,167	3,093	2,748	2,875	2,590	2,255	2,850
NSF	30	42	41	43	49	48	47	46	57
USDA	NA	NA	21	42	48	31	46	58	60
All other Federal	1,143	1,181	1,105	1,090	1,279	1,274	1,367	1,267	1,330
Institutional support	4,605	5,042	5,259	5,505	5,510	5,838	6,446	6,348	7,135
Other outside support, total	1,566	1,602	1,825	1,531	1,480	1,256	1,405	1,302	1,540
All other U.S.	1,092	1,107	1,101	1,008	973	866	926	845	1,083
Foreign	474	495	524	523	507	390	480	457	457
Self-support	8,686	8,461	8,102	8,183	8,353	8,979	9,338	9,648	11,913

KEY: NA = Not available

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table C-19. Full-time science and engineering graduate students in doctorate-granting institutions, by field and type of major support: 1983-91

Page 1 of 2

Field and type of major support	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields									
Total, all types	235,166	36,554	240,386	249,098	253,187	258,318	265,188	268,864	286,756
Fellowships	20,871	21,079	22,173	22,530	21,599	22,050	23,106	24,118	26,530
Traineeships	13,125	12,912	12,918	12,871	13,215	13,725	13,763	13,717	14,883
Research assistantships	53,581	56,329	59,769	64,810	68,909	73,089	77,418	77,686	82,719
Teaching assistantships	57,529	58,724	59,487	60,305	60,644	60,973	62,177	61,753	62,681
Other types of support	90,060	87,510	86,039	88,582	88,820	88,481	88,724	91,590	99,743
Sciences, total									
Total, all types	162,474	162,331	165,264	169,693	171,976	175,129	179,633	182,634	190,559
Fellowships	14,752	14,896	15,799	16,207	15,540	16,255	16,834	17,532	19,225
Traineeships	7,789	7,638	7,653	7,471	8,051	8,341	8,571	8,850	9,115
Research assistantships	36,584	38,422	39,805	42,228	44,362	47,075	49,944	49,659	52,493
Teaching assistantships	45,661	46,251	46,835	47,182	47,593	47,970	49,164	49,152	49,531
Other types of support	57,688	55,124	55,072	56,605	56,430	55,488	55,120	57,441	60,195
Physical sciences									
Total, all types	24,502	25,147	25,938	27,069	27,652	27,778	28,428	28,344	29,364
Fellowships	1,900	2,069	1,898	1,862	1,792	1,776	1,922	2,229	2,682
Traineeships	388	344	403	514	534	495	595	651	768
Research assistantships	9,060	9,517	10,174	10,896	11,455	11,931	12,272	11,807	12,027
Teaching assistantships	10,904	10,977	11,119	11,324	11,413	11,255	11,464	11,346	11,419
Other types of support	2,250	2,240	2,344	2,473	2,458	2,321	2,175	2,311	2,468
Earth, atmospheric, & ocean sciences									
Total, all types	11,516	11,284	10,890	10,886	10,097	9,844	9,721	9,830	9,880
Fellowships	871	947	966	837	729	762	752	779	899
Traineeships	259	160	165	139	167	152	111	84	93
Research assistantships	3,480	3,515	3,673	3,790	3,619	3,836	4,078	4,042	4,203
Teaching assistantships	2,763	2,745	2,535	2,545	2,397	2,448	2,366	2,293	2,264
Other types of support	4,143	3,917	3,551	3,575	3,185	2,648	2,414	2,632	2,421
Mathematical sciences									
Total, all types	10,314	10,609	11,145	11,723	12,341	12,800	13,004	13,154	13,525
Fellowships	685	752	851	899	851	920	985	1,110	1,339
Traineeships	115	149	141	120	150	188	211	189	220
Research assistantships	776	846	969	1,012	1,072	1,174	1,244	1,258	1,272
Teaching assistantships	6,138	6,321	6,536	6,893	7,203	7,337	7,543	7,542	7,463
Other types of support	2,600	2,541	2,648	2,799	3,065	3,181	3,021	3,055	3,231
Computer sciences									
Total, all types	9,276	10,108	12,374	13,389	13,639	13,695	14,063	14,689	14,583
Fellowships	474	543	757	805	764	771	797	891	849
Traineeships	50	69	50	88	73	103	126	130	116
Research assistantships	1,367	1,582	2,017	2,284	2,782	2,965	3,244	3,191	3,400
Teaching assistantships	2,312	2,646	3,084	3,109	3,258	3,297	3,307	3,456	3,295
Other types of support	5,073	5,268	6,466	7,103	6,762	6,559	6,589	7,021	6,923
Agricultural sciences									
Total, all types	9,510	9,424	8,815	8,937	8,691	8,674	8,613	8,643	8,793
Fellowships	560	552	558	537	446	406	475	489	430
Traineeships	228	139	120	113	119	126	94	78	82
Research assistantships	4,578	4,677	4,370	4,645	4,555	4,474	4,622	4,614	4,868
Teaching assistantships	891	842	829	760	729	828	753	771	787
Other types of support	3,253	3,214	2,938	2,882	2,842	2,840	2,669	2,691	2,626
Biological sciences									
Total, all types	34,967	35,442	35,479	36,363	36,959	37,993	39,133	38,901	41,282
Fellowships	3,566	3,637	3,934	4,221	4,250	4,213	4,477	4,600	4,735
Traineeships	4,328	4,307	4,214	4,174	4,403	4,579	4,657	4,845	5,074
Research assistantships	9,910	10,683	11,021	11,864	12,709	13,884	14,956	15,101	16,481
Teaching assistantships	8,921	8,877	8,868	8,560	8,279	8,198	8,484	8,055	8,300
Other types of support	8,262	7,938	7,442	7,544	7,318	7,119	6,559	6,300	6,692
Psychology									
Total, all types	22,122	21,572	21,291	21,897	22,375	23,314	24,240	24,655	26,052
Fellowships	1,212	1,226	1,214	1,341	1,337	1,423	1,398	1,584	1,679
Traineeships	1,334	1,408	1,545	1,254	1,192	1,168	1,119	1,059	1,148
Research assistantships	2,669	2,759	2,859	2,878	2,959	3,462	3,584	3,692	3,867
Teaching assistantships	4,613	4,640	4,776	4,967	4,973	5,113	5,323	5,332	5,339
Other types of support	12,294	11,539	10,897	11,457	11,914	12,148	12,816	12,988	14,019
Social sciences									
Total, all types	40,247	38,745	39,332	39,429	40,222	41,031	42,431	44,418	47,080
Fellowships	5,484	5,170	5,621	5,705	5,371	5,984	6,028	5,850	6,612
Traineeships	1,087	1,062	1,015	1,069	1,413	1,530	1,658	1,814	1,614
Research assistantships	4,744	4,843	4,822	4,859	5,211	5,349	5,944	5,954	6,375
Teaching assistantships	9,119	9,203	9,088	9,024	9,341	9,496	9,924	10,357	10,664
Other types of support	19,813	18,467	18,786	18,772	18,886	18,672	18,877	20,443	21,815

See explanatory information, if any, and SOURCE(S) at end of table.



**Table C-19. Full-time science and engineering graduate students in doctorate-granting institutions, by field and type of major support: 1993-91**

Page 2 of 2

Field and type of major support	1993	1994	1995	1996	1997	1998	1999	2000	2001
<b>Engineering, total</b>									
Total, all types	52,294	53,592	54,462	58,532	60,043	61,266	62,363	63,378	68,925
Fellowships	4,678	4,737	4,663	4,786	4,487	4,392	4,626	4,999	5,603
Traineeships	745	715	750	829	894	917	968	982	1,118
Research assistantships	15,438	16,125	17,763	20,282	21,992	23,270	24,331	24,877	26,464
Teaching assistantships	9,861	10,323	10,543	10,891	10,907	10,879	10,796	10,543	10,953
Other types of support	21,572	21,692	20,743	21,744	21,763	21,808	21,642	21,977	24,787
<b>Chemical engineering</b>									
Total, all types	5,790	5,656	5,494	5,542	5,578	5,330	5,245	5,354	5,733
Fellowships	872	894	844	818	764	703	646	735	672
Traineeships	141	131	94	108	124	105	145	147	185
Research assistantships	2,253	2,325	2,454	2,581	2,730	2,813	2,810	2,798	2,922
Teaching assistantships	1,120	1,113	1,057	993	990	949	896	928	1,017
Other types of support	1,404	1,193	1,045	1,042	970	760	748	746	937
<b>Civil engineering</b>									
Total, all types	9,533	9,853	9,518	9,704	9,380	9,629	9,643	9,793	10,836
Fellowships	599	509	636	595	463	552	616	604	679
Traineeships	113	120	137	188	208	194	200	211	209
Research assistantships	2,234	2,420	2,404	2,772	2,893	3,051	3,016	3,060	3,520
Teaching assistantships	1,482	1,610	1,646	1,722	1,730	1,706	1,666	1,594	1,604
Other types of support	5,105	5,194	4,695	4,427	4,086	4,126	4,145	4,324	4,824
<b>Electrical engineering</b>									
Total, all types	12,854	13,461	14,358	15,732	16,457	17,012	17,597	17,756	19,181
Fellowships	1,056	1,122	1,134	1,171	1,054	1,031	1,176	1,176	1,363
Traineeships	119	113	148	164	122	138	141	173	197
Research assistantships	3,180	3,129	3,643	4,411	5,053	5,655	6,031	6,170	6,457
Teaching assistantships	2,972	3,211	3,238	3,417	3,289	3,264	3,351	3,257	3,356
Other types of support	5,527	5,886	6,195	6,569	6,939	6,924	6,898	6,980	7,808
<b>Industrial engineering</b>									
Total, all types	3,130	3,271	3,342	3,704	4,045	4,176	4,492	4,476	5,422
Fellowships	179	201	195	196	195	174	207	243	258
Traineeships	34	14	24	17	48	44	43	36	31
Research assistantships	420	533	556	690	906	1,012	1,112	1,096	1,232
Teaching assistantships	644	692	818	847	785	746	812	823	882
Other types of support	1,853	1,831	1,749	1,954	2,111	2,200	2,318	2,278	3,019
<b>Mechanical engineering</b>									
Total, all types	8,178	8,511	8,683	9,587	9,955	10,186	10,185	10,337	11,371
Fellowships	653	669	622	666	625	545	565	699	851
Traineeships	84	92	129	137	148	179	187	132	173
Research assistantships	2,347	2,632	3,254	3,655	3,920	4,046	4,221	4,208	4,604
Teaching assistantships	1,971	2,032	2,037	2,129	2,189	2,229	2,196	2,150	2,147
Other types of support	3,123	3,066	2,641	3,000	3,073	3,187	3,016	3,148	3,596
<b>Other engineering</b>									
Total, all types	12,809	12,840	13,067	14,263	14,628	14,933	15,201	15,662	16,382
Fellowships	1,319	1,342	1,232	1,340	1,386	1,387	1,416	1,542	1,780
Traineeships	254	245	218	215	244	257	252	283	323
Research assistantships	5,004	5,086	5,452	6,173	6,490	6,693	7,141	7,545	7,729
Teaching assistantships	1,672	1,665	1,747	1,763	1,924	1,985	1,875	1,791	1,947
Other types of support	4,560	4,502	4,418	4,752	4,584	4,611	4,517	4,501	4,603
<b>Total, health fields</b>									
Total, all types	20,398	20,631	20,660	20,873	21,168	21,923	23,192	22,852	27,272
Fellowships	1,441	1,446	1,711	1,537	1,572	1,403	1,646	1,587	1,702
Traineeships	4,591	4,559	4,515	4,571	4,270	4,467	4,224	3,885	4,650
Research assistantships	1,559	1,782	2,101	2,300	2,555	2,744	3,143	3,150	3,762
Teaching assistantships	2,007	2,150	2,109	2,232	2,144	2,124	2,217	2,058	2,397
Other types of support	10,800	10,694	10,224	10,233	10,627	11,185	11,962	12,172	14,761

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table C-20. Full-time science and engineering graduate students in doctorate-granting institutions,  
by type and source of major support: 1983-91

Page 1 of 2

Type and source of major support	1983	1984	1985	1986	1987	1988	1989	1990	1991
<b>Total, all types</b>									
Total, all sources	235,188	236,554	240,386	249,098	253,187	258,318	265,188	268,884	286,758
Federal, total	46,691	46,693	47,798	50,191	52,222	54,285	56,193	56,730	61,810
Dept of Defense	6,870	7,020	7,214	7,834	8,684	9,411	9,110	8,643	9,083
Dept of HHS, total	14,720	14,821	15,343	15,992	16,699	17,510	18,119	18,116	20,137
NIH	10,695	10,876	11,024	11,810	12,807	13,639	14,368	14,644	15,923
Other HHS	4,025	3,945	4,319	4,182	3,892	3,871	3,751	3,472	4,214
NSF	9,484	9,798	10,146	10,804	11,203	11,593	11,828	11,885	12,538
USDA	NA	NA	2,130	2,312	2,625	2,557	2,690	2,647	3,002
All other Federal	15,637	15,054	12,965	13,249	13,011	13,214	14,446	15,439	17,050
Institutional support	93,685	97,480	99,877	105,021	107,918	110,628	114,795	115,993	120,563
Other outside support, total	24,062	24,111	25,929	25,988	24,618	24,927	25,234	25,211	26,561
All other U.S.	15,443	16,206	18,383	18,580	17,831	18,333	18,812	18,954	20,020
Foreign	8,619	7,905	7,546	7,408	6,787	6,594	6,422	6,257	6,541
Self-support	70,748	68,270	66,782	67,898	68,429	68,480	66,966	70,930	77,822
<b>Fellowships</b>									
Total, all sources	20,871	21,079	22,173	22,530	21,599	22,050	23,106	24,118	26,530
Federal, total	3,972	3,968	4,292	4,455	4,319	4,460	5,049	6,104	7,341
Dept of Defense	256	237	260	293	334	353	416	559	687
Dept of HHS, total	756	772	866	813	849	861	895	1,001	1,140
NIH	555	593	630	645	687	698	693	825	946
Other HHS	201	179	236	168	162	163	202	176	194
NSF	1,303	1,340	1,392	1,509	1,479	1,563	1,772	2,077	2,229
USDA	NA	NA	147	166	145	90	102	107	99
All other Federal	1,657	1,619	1,627	1,674	1,512	1,573	1,864	2,360	3,186
Institutional support	9,620	10,052	10,996	11,443	11,312	11,713	12,229	12,396	13,151
Other outside support, total	7,279	7,059	6,885	6,632	5,968	5,877	5,828	5,618	6,038
All other U.S.	3,747	3,941	4,094	3,966	3,644	3,408	3,522	3,510	3,735
Foreign	3,532	3,118	2,791	2,666	2,324	2,469	2,306	2,108	2,303
Self-support	0	0	0	0	0	0	0	0	0
<b>Traineeships</b>									
Total, all sources	13,125	12,912	12,918	12,871	13,215	13,725	13,763	13,717	14,883
Federal, total	8,913	8,635	8,389	8,267	8,349	8,251	8,184	8,159	9,377
Dept of Defense	79	61	49	79	136	133	118	100	143
Dept of HHS, total	7,566	7,330	7,184	7,071	6,961	6,923	6,601	6,560	7,565
NIH	4,463	4,274	4,052	3,923	4,208	4,098	4,082	4,365	4,816
Other HHS	3,103	3,056	3,132	3,148	2,753	2,825	2,519	2,195	2,749
NSF	47	42	56	27	82	68	84	62	97
USDA	NA	NA	71	57	83	44	46	57	32
All other Federal	1,221	1,202	1,029	1,033	1,087	1,083	1,335	1,380	1,540
Institutional support	3,142	3,324	3,575	3,704	4,002	4,543	4,680	4,777	4,735
Other outside support, total	1,070	953	954	900	864	931	899	781	771
All other U.S.	721	690	682	697	619	692	627	544	589
Foreign	349	263	292	203	245	239	272	237	182
Self-support	0	0	0	0	0	0	0	0	0
<b>Research assistantships</b>									
Total, all sources	53,581	56,329	59,769	64,810	68,909	73,089	77,418	77,686	82,719
Federal, total	28,819	29,121	30,127	32,474	34,692	36,441	38,136	37,577	40,021
Dept of Defense	3,919	4,050	4,167	4,627	5,595	5,959	5,823	5,288	5,401
Dept of HHS, total	5,900	6,258	6,801	7,621	8,355	9,248	10,144	10,069	10,898
NIH	5,356	5,677	6,052	6,919	7,535	8,469	9,217	9,087	9,781
Other HHS	544	581	749	702	820	779	927	982	1,117
NSF	8,027	8,246	8,531	9,067	9,458	9,793	9,819	9,585	10,032
USDA	NA	NA	1,784	1,942	2,282	2,273	2,419	2,359	2,744
All other Federal	10,973	10,567	8,844	9,217	9,002	9,168	9,931	10,276	10,946
Institutional support	17,018	18,681	19,524	22,129	24,080	25,484	27,835	28,186	29,938
Other outside support, total	7,744	8,527	10,118	10,207	10,137	11,184	11,647	11,923	12,760
All other U.S.	7,166	7,928	9,573	9,621	9,545	10,548	10,989	11,206	11,943
Foreign	558	599	545	586	592	616	658	717	817
Self-support	0	0	0	0	0	0	0	0	0
<b>Teaching assistantships</b>									
Total, all sources	57,529	58,724	59,487	60,305	60,644	80,973	62,177	61,753	62,881
Federal, total	469	376	537	457	425	429	447	547	503
Dept of Defense	0	0	0	0	0	0	0	0	0
Dept of HHS, total	111	69	96	110	151	133	135	113	112
NIH	74	42	57	82	123	109	125	84	88
Other HHS	37	27	39	28	28	24	10	19	24
NSF	25	24	43	73	26	53	61	65	101
USDA	NA	NA	40	33	17	43	33	44	33
All other Federal	333	283	358	241	231	200	218	305	257
Institutional support	56,893	57,957	58,465	59,357	59,781	60,100	61,226	60,721	61,820
Other outside support, total	367	391	485	491	438	444	504	485	558
All other U.S.	367	391	485	491	438	444	504	485	558
Foreign	0	0	0	0	0	0	0	0	0
Self-support	0	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE(S) at end of table.

**Table C-20. Full-time science and engineering graduate students in doctorate-granting institutions, by type and source of major support: 1983-91**

Page 2 of 2

Type and source of major support	1983	1984	1985	1986	1987	1988	1989	1990	1991
Other types of support									
Total, all sources	90,060	87,510	86,039	88,582	88,820	88,481	88,724	91,590	99,743
Federal, total	4,518	4,593	4,453	4,538	4,437	4,704	4,377	4,343	4,568
Dept of Defense	2,616	2,672	2,738	2,835	2,619	2,966	2,753	2,696	2,852
Dept of HHS, total	387	392	396	377	383	345	344	373	422
NIH	247	290	233	241	254	265	251	273	292
Other HHS	140	102	163	136	129	80	93	100	130
NSF	62	146	124	128	158	96	92	76	79
USDA	NA	NA	88	114	98	107	90	80	94
All other Federal	1,453	1,383	1,107	1,084	1,179	1,190	1,098	1,118	1,121
Institutional support	7,192	7,466	7,317	8,388	8,743	8,786	9,025	9,913	10,919
Other outside support, total	7,602	7,181	7,487	7,758	7,211	6,511	6,356	6,404	6,434
All other U.S.	3,422	3,256	3,569	3,805	3,585	3,241	3,170	3,209	3,195
Foreign	4,180	3,925	3,918	3,953	3,626	3,270	3,186	3,195	3,239
Self-support	70,748	68,270	66,782	67,898	68,429	68,480	68,966	70,930	77,822

KEY: NA = Not available

SCURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table C-21. Full-time science and engineering graduate students with U.S. citizenship in doctorate-granting institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields .....	175,867	175,833	174,831	176,819	177,368	177,593	181,330	182,213	194,839
Total, science/engineering fields .....	157,713	157,414	156,621	158,550	158,878	158,636	161,347	162,704	171,286
Engineering, total .....	30,165	31,096	31,025	32,257	32,777	32,506	33,060	33,072	35,972
Aerospace .....	1,078	1,104	1,249	1,332	1,547	1,491	1,743	1,834	2,126
Agricultural .....	425	446	414	457	478	406	361	332	356
Biomedical .....	817	886	924	1,001	976	971	1,007	1,167	1,238
Chemical .....	3,589	3,560	3,305	3,387	3,324	2,954	2,664	2,648	2,805
Civil .....	5,379	5,536	5,123	5,132	4,915	4,955	4,891	5,147	5,783
Electrical .....	7,191	7,679	7,943	8,286	8,643	8,950	9,350	9,184	9,691
Engineering science .....	846	772	780	838	768	792	693	729	767
Industrial .....	1,829	1,863	1,795	1,974	2,077	2,164	2,335	2,199	2,678
Mechanical .....	4,247	4,509	4,778	5,118	5,401	5,186	5,506	5,520	5,979
Metallurgical/materials .....	1,520	1,659	1,797	1,837	1,812	1,790	1,869	2,010	2,070
Mining .....	251	262	237	230	214	173	138	117	117
Nuclear .....	591	606	600	614	594	644	628	577	590
Petroleum .....	321	318	311	290	310	226	198	146	118
Engineering, n.e.c. ....	2,081	1,896	1,769	1,761	1,718	1,804	1,677	1,462	1,654
Sciences, total .....	127,548	126,318	125,596	126,293	126,101	126,130	128,287	129,632	135,314
Physical sciences .....	17,458	17,719	17,685	17,778	17,856	17,529	17,555	17,129	17,734
Astronomy .....	480	479	485	494	509	545	604	603	598
Chemistry .....	11,092	11,076	11,109	11,141	10,930	10,392	10,239	9,780	10,070
Physics .....	5,836	6,044	5,974	6,039	6,280	6,510	6,637	6,673	6,985
Physical sciences, n.e.c. ....	50	120	117	104	137	82	75	73	81
Earth, atmospheric, & ocean sciences .....	9,858	9,733	9,255	9,018	8,157	7,702	7,425	7,451	7,376
Atmospheric sciences .....	598	609	672	648	603	595	569	564	569
Geosciences .....	7,000	6,913	6,435	6,106	5,325	4,886	4,519	4,251	4,114
Oceanography .....	1,171	1,221	1,208	1,263	1,247	1,139	1,230	1,286	1,296
Earth, atmos. & ocean sci., n.e.c. ....	1,089	990	940	1,001	982	1,082	1,107	1,350	1,397
Mathematical sciences .....	6,234	6,262	6,500	6,774	7,050	7,213	7,203	7,478	7,857
Computer sciences .....	5,763	6,109	7,481	7,943	7,929	7,665	7,704	7,718	7,493
Agricultural sciences .....	7,107	7,090	6,498	6,415	6,113	6,080	6,046	5,877	6,018
Biological sciences .....	29,689	29,868	29,327	29,379	29,107	29,145	29,284	28,673	29,921
Anatomy .....	847	878	800	772	771	793	784	705	716
Biochemistry .....	3,185	3,375	3,479	3,536	3,391	3,406	3,298	3,173	3,233
Biology .....	6,650	6,528	6,189	6,174	6,161	6,215	6,499	6,339	6,553
Biometry/epidemiology .....	720	628	823	826	920	933	930	907	1,000
Biophysics .....	357	339	288	329	343	365	402	398	414
Botany .....	2,313	2,258	2,108	2,034	1,838	1,702	1,615	1,408	1,425
Cell biology .....	1,010	1,062	1,217	1,380	1,553	1,618	1,700	1,860	2,093
Ecology .....	758	778	764	745	675	700	738	733	775
Entomology/parasitology .....	1,065	1,040	904	855	767	775	718	699	679
Genetics .....	777	811	851	927	926	886	915	912	1,069
Microbiology .....	3,176	3,271	3,220	3,133	3,195	3,350	3,251	3,156	3,208
Nutrition .....	2,080	2,037	2,023	2,062	1,963	1,813	1,783	1,776	1,778
Pathology .....	846	897	832	848	834	856	846	804	799
Pharmacology .....	1,697	1,685	1,743	1,640	1,548	1,550	1,630	1,611	1,676
Physiology .....	1,554	1,714	1,721	1,687	1,646	1,561	1,507	1,535	1,525
Zoology .....	1,885	1,700	1,521	1,520	1,552	1,447	1,498	1,351	1,457
Biosciences, n.e.c. ....	769	867	844	911	1,024	1,175	1,170	1,306	1,521
Psychology .....	21,187	20,648	20,259	20,867	21,308	22,110	23,016	23,325	24,588
Social sciences .....	30,252	28,689	28,591	28,119	28,581	28,686	30,054	31,981	34,327
Agricultural economics .....	1,269	1,249	1,206	1,191	1,107	1,028	991	1,024	1,026
Anthropology .....	3,470	3,516	3,363	3,471	3,450	3,550	3,682	4,011	4,215
Economics (except agricultural) .....	5,418	5,030	4,779	4,708	4,597	4,420	4,419	4,495	4,827
Geography .....	1,644	1,624	1,591	1,564	1,644	1,564	1,695	1,737	1,935
History and philosophy of science .....	189	201	176	198	226	221	258	296	284
Linguistics .....	1,479	1,435	1,368	1,366	1,464	1,481	1,409	1,453	1,503
Political science .....	9,363	8,743	9,128	9,079	8,922	9,107	9,952	10,490	11,620
Sociology .....	3,463	3,380	3,190	3,116	3,457	3,440	3,636	3,971	4,194
Sociology/anthropology .....	469	451	406	427	404	417	474	593	526
Social sciences, n.e.c. ....	3,468	3,260	3,384	2,999	3,310	3,458	3,538	3,911	4,197
Total, health fields .....	18,154	18,419	18,210	18,269	18,490	18,957	19,983	19,509	23,553
Dentistry .....	579	640	590	639	756	767	680	628	663
Neurology .....	217	270	287	321	401	487	596	627	794
Nursing .....	5,577	5,522	4,995	4,984	4,928	4,671	4,543	3,343	5,358
Pharmaceutical sciences .....	1,137	1,124	1,140	1,145	1,130	1,092	1,206	1,117	1,272
Preventive medicine/community health .....	3,213	3,258	3,301	3,241	3,285	3,320	3,312	3,484	3,442
Speech pathology/audiology .....	4,115	4,105	4,244	4,106	3,712	4,080	4,303	4,245	4,836
Veterinary sciences .....	239	295	367	351	422	432	464	501	487
Clinical medicine, n.e.c. ....	829	864	919	892	931	982	1,086	1,080	1,270
Health related, n.e.c. ....	2,248	2,341	2,367	2,590	2,925	3,126	3,793	4,484	5,431

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

BEST COPY AVAILABLE 146

**Table C-22. Full-time science and engineering graduate students without U.S. citizenship in doctorate-granting institutions, by field: 1983-91**

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields .....	59,299	60,721	65,555	72,279	75,819	80,725	83,858	86,651	91,917
Total, science/engineering fields .....	57,055	58,509	63,105	69,675	73,141	77,759	80,649	83,308	88,198
Engineering, total .....	22,129	22,496	23,437	26,275	27,266	28,760	29,303	30,306	32,953
Aerospace .....	747	736	731	806	808	1,026	999	1,112	1,121
Agricultural .....	341	327	353	424	446	473	490	461	469
Biomedical .....	195	220	193	279	376	431	565	577	658
Chemical .....	2,201	2,096	2,189	2,155	2,254	2,376	2,581	2,706	2,928
Civil .....	4,154	4,317	4,395	4,572	4,465	4,674	4,752	4,846	5,053
Electrical .....	5,663	5,782	6,415	7,446	7,814	8,082	8,247	8,572	9,490
Engineering science .....	493	484	466	589	588	613	556	503	590
Industrial .....	1,301	1,408	1,547	1,730	1,968	2,012	2,157	2,277	2,744
Mechanical .....	3,931	4,002	3,905	4,469	4,554	5,000	4,679	4,817	5,392
Metallurgical/materials .....	1,166	1,204	1,278	1,503	1,597	1,651	1,818	1,888	1,964
Mining .....	153	141	134	189	192	206	174	189	208
Nuclear .....	461	412	430	445	450	461	484	503	490
Petroleum .....	286	284	240	261	309	344	296	311	396
Engineering, n.e.c. ....	1,037	1,083	1,161	1,407	1,445	1,431	1,505	1,744	1,450
Sciences, total .....	34,926	36,013	39,668	43,400	45,875	48,999	51,346	53,002	55,245
Physical sciences .....	7,044	7,428	8,253	9,291	9,796	10,249	10,873	11,215	11,630
Astronomy .....	105	117	150	160	172	180	158	187	212
Chemistry .....	3,403	3,539	3,958	4,396	4,805	5,190	5,571	5,865	6,219
Physics .....	3,525	3,756	4,129	4,714	4,798	4,863	5,124	5,139	5,173
Physical sciences, n.e.c. ....	11	16	16	21	21	36	20	24	26
Earth, atmospheric, & ocean sciences .....	1,658	1,551	1,635	1,866	1,940	2,142	2,296	2,379	2,504
Atmospheric sciences .....	180	161	195	206	219	230	234	264	288
Geosciences .....	908	884	915	1,004	1,066	1,174	1,269	1,324	1,358
Oceanography .....	376	297	312	389	356	437	515	510	538
Earth, atmos., & ocean sci., n.e.c. ....	194	209	213	269	279	301	278	281	320
Mathematical sciences .....	4,080	4,347	4,645	4,949	5,291	5,587	5,801	5,676	5,668
Computer sciences .....	3,513	3,999	4,893	5,446	5,710	6,030	6,359	6,971	7,090
Agricultural sciences .....	2,403	2,334	2,317	2,522	2,578	2,594	2,567	2,766	2,775
Biological sciences .....	5,298	5,574	6,152	6,984	7,852	8,848	9,849	10,228	11,361
Anatomy .....	74	58	91	121	153	180	215	202	240
Biochemistry .....	767	842	967	1,089	1,209	1,328	1,508	1,619	1,720
Biology .....	834	976	987	1,148	1,268	1,422	1,594	1,656	1,740
Biometry/epidemiology .....	157	123	173	222	270	303	306	346	446
Biophysics .....	80	80	93	120	125	179	208	174	231
Botany .....	571	581	587	690	718	818	808	763	804
Cell biology .....	128	147	189	275	333	405	477	499	618
Ecology .....	77	87	100	99	109	122	134	151	150
Entomology/parasitology .....	240	224	234	252	295	286	291	298	335
Genetics .....	142	131	163	202	241	260	296	269	306
Microbiology .....	504	532	647	720	803	946	1,069	1,119	1,192
Nutrition .....	802	858	893	866	929	945	954	1,044	1,079
Pathology .....	205	167	188	202	244	244	288	293	339
Pharmacology .....	234	240	250	318	379	442	510	543	632
Physiology .....	212	255	265	318	350	447	550	581	635
Zoology .....	140	144	178	188	223	261	268	261	308
Biosciences, n.e.c. ....	131	129	147	154	203	260	373	410	586
Psychology .....	935	924	1,032	1,030	1,067	1,204	1,224	1,330	1,464
Social sciences .....	9,995	9,856	10,741	11,310	11,641	12,345	12,377	12,437	12,753
Agricultural economics .....	725	726	740	724	716	850	894	910	942
Anthropology .....	396	384	442	535	565	649	654	693	713
Economics (except agricultural) .....	3,369	3,395	3,798	3,916	4,068	4,316	4,379	4,448	4,587
Geography .....	368	359	348	367	406	391	405	414	397
History and philosophy of science .....	40	42	51	39	41	45	45	44	56
Linguistics .....	837	829	935	941	924	957	980	1,003	1,043
Political science .....	2,435	2,281	2,400	2,726	2,689	2,759	2,551	2,444	2,630
Sociology .....	1,074	1,037	1,165	1,197	1,279	1,380	1,339	1,344	1,253
Sociology/anthropology .....	127	121	128	123	123	121	133	137	120
Social sciences, n.e.c. ....	624	682	734	742	830	877	997	1,000	1,012
Total, health fields .....	2,244	2,212	2,450	2,604	2,678	2,966	3,209	3,343	3,719
Dentistry .....	122	132	156	177	145	156	170	184	226
Neurology .....	27	29	34	48	69	96	112	143	174
Nursing .....	149	160	145	151	157	158	154	152	230
Pharmaceutical sciences .....	629	645	647	696	693	814	911	879	1,000
Preventive medicine/community health .....	713	657	785	795	808	861	868	963	1,004
Speech pathology/audiology .....	222	187	201	234	207	236	243	249	288
Veterinary sciences .....	98	107	124	135	153	157	185	197	219
Clinical medicine, n.e.c. ....	148	106	178	172	190	205	248	275	293
Health related, n.e.c. ....	136	189	180	196	256	283	318	301	285

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



Table C-23. Part-time science and engineering graduate students in doctorate-granting institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields	106,194	108,101	113,310	115,136	115,171	115,591	114,333	116,047	124,540
Total, science/engineering fields	89,449	90,150	95,202	95,915	96,415	96,343	95,269	97,594	101,239
Engineering, total	32,189	32,644	34,969	36,309	36,171	34,857	34,019	34,977	36,167
Aerospace	448	468	526	633	625	669	645	829	727
Agricultural	203	181	174	173	139	160	180	146	158
Biomedical	173	182	200	201	281	274	281	305	289
Chemical	1,562	1,540	1,521	1,349	1,327	1,202	1,116	1,205	1,267
Civil	4,503	4,518	4,571	4,398	4,245	4,267	4,284	4,543	5,149
Electrical	10,594	11,030	11,915	11,999	12,446	12,643	12,510	12,449	12,599
Engineering science	642	644	592	701	755	762	809	761	767
Industrial	5,416	5,384	6,505	7,132	7,409	6,525	5,731	5,643	6,351
Mechanical	3,911	4,455	4,563	4,993	5,109	4,838	4,775	4,765	5,249
Metallurgical/materials	652	709	748	737	835	786	782	885	961
Mining	94	74	92	68	78	71	76	103	150
Nuclear	151	216	190	206	235	198	211	198	202
Petroleum	117	130	201	175	171	141	157	181	186
Engineering, n.e.c.	3,723	3,113	3,171	3,544	2,536	2,321	2,462	2,964	2,112
Sciences, total	57,260	57,506	60,233	59,606	60,244	61,486	61,250	62,617	65,072
Physical sciences	3,245	3,263	3,374	3,474	3,315	3,434	3,378	3,507	3,574
Astronomy	33	43	36	35	41	26	27	20	19
Chemistry	2,053	1,984	2,085	2,065	1,932	1,900	1,903	2,008	2,028
Physics	1,151	1,185	1,194	1,261	1,252	1,414	1,355	1,377	1,418
Physical sciences, n.e.c.	8	51	59	113	90	94	93	102	109
Earth, atmospheric, & ocean sciences	2,811	3,045	3,373	3,150	3,271	3,065	2,981	3,010	3,344
Atmospheric sciences	106	125	84	102	126	104	97	97	99
Geosciences	1,780	1,919	2,183	2,066	1,974	1,844	1,788	1,624	1,596
Oceanography	360	411	464	375	419	350	325	317	339
Earth, atmos. & ocean sci., n.e.c.	565	590	642	607	752	767	771	972	1,310
Mathematical sciences	4,532	4,420	4,073	3,893	3,781	3,957	3,800	3,959	4,001
Computer sciences	9,030	10,258	11,449	11,787	12,444	13,016	12,418	12,858	13,110
Agricultural sciences	2,134	2,022	1,984	1,842	1,739	1,722	1,830	1,896	1,954
Biological sciences	6,343	6,229	6,722	6,713	6,382	6,360	6,308	6,739	6,811
Anatomy	116	93	102	80	87	83	79	89	90
Biochemistry	213	215	186	227	178	167	249	195	222
Biology	2,023	1,979	2,316	2,395	2,132	2,091	1,923	2,109	2,144
Biometry/epidemiology	279	253	364	386	420	499	541	670	620
Biophysics	13	14	60	98	123	48	45	27	18
Botany	370	379	465	377	404	372	383	345	382
Cell biology	44	47	23	61	78	55	57	68	93
Ecology	127	169	114	112	115	141	165	199	200
Entomology/parasitology	170	174	204	199	182	179	172	176	157
Genetics	67	70	61	90	106	101	110	106	107
Microbiology	457	426	475	427	362	412	443	452	479
Nutrition	1,211	1,128	1,089	1,059	1,084	1,169	1,180	1,141	1,062
Pathology	355	346	279	268	264	226	216	239	308
Pharmacology	132	120	112	120	149	139	130	143	128
Physiology	228	191	225	215	217	212	149	160	169
Zoology	365	422	404	357	322	314	309	413	408
Biosciences, n.e.c.	173	203	243	242	159	152	157	207	224
Psychology	7,803	8,374	9,094	8,622	8,634	9,073	9,152	9,589	10,306
Social sciences	21,362	19,885	20,164	20,125	20,678	20,859	21,383	21,059	21,972
Agricultural economics	243	237	254	269	329	331	342	298	345
Anthropology	1,533	1,471	1,603	1,586	1,468	1,511	1,580	1,511	1,482
Economics (except agricultural)	3,130	2,995	2,742	2,533	2,459	2,467	2,485	2,479	2,492
Geography	603	594	576	640	621	646	719	717	791
History and philosophy of science	24	31	45	29	27	22	39	29	43
Linguistics	497	656	501	512	532	443	530	499	556
Political science	10,418	9,106	9,717	9,802	10,616	10,376	10,662	10,283	10,823
Sociology	1,805	1,693	1,639	1,523	1,572	1,606	1,653	1,562	1,776
Sociology/anthropology	418	388	372	354	355	374	339	366	307
Social sciences, n.e.c.	2,691	2,724	2,715	2,877	2,699	3,083	3,034	3,315	3,357
Total, health fields	16,745	17,951	18,108	19,221	18,756	19,248	19,064	18,453	23,301
Dentistry	75	82	90	113	148	155	148	129	141
Neurology	3	4	2	3	2	3	15	12	13
Nursing	9,260	10,231	9,929	10,147	9,664	9,649	9,301	8,432	13,052
Pharmaceutical sciences	859	731	746	831	779	703	792	792	879
Preventive medicine/community health	2,566	2,742	3,015	3,007	3,202	3,356	3,370	3,632	3,875
Speech pathology/audiology	1,500	1,480	1,538	1,690	1,523	1,610	1,602	1,781	1,765
Veterinary sciences	103	129	119	121	136	146	133	183	169
Clinical medicine, n.e.c.	305	323	383	356	382	393	261	260	329
Health related, n.e.c.	2,074	2,229	2,285	2,953	2,920	3,233	3,442	3,232	3,078

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table C-24. Part-time science and engineering graduate students in doctorate-granting institutions, by geographic distribution: 1983-91

Page 1 of 1

Division and State	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all institutions .....	106,194	108,101	113,310	115,138	115,171	115,591	114,333	116,047	124,540
New England .....	7,356	7,165	7,611	7,456	7,387	7,784	7,168	7,374	8,045
Connecticut .....	508	528	577	700	792	814	820	773	883
Maine .....	97	118	118	117	169	145	162	165	160
Massachusetts .....	5,989	5,818	6,127	5,818	5,863	5,961	5,395	5,811	6,233
New Hampshire .....	129	110	143	135	98	133	180	139	128
Rhode Island .....	425	358	449	469	449	527	454	353	489
Vermont .....	208	235	197	219	196	204	157	133	152
Middle Atlantic .....	28,786	28,894	29,266	29,572	27,780	27,928	26,284	26,654	28,092
New Jersey .....	5,158	5,559	5,669	5,413	5,387	5,783	5,105	5,268	5,313
New York .....	17,309	17,068	17,218	17,459	15,881	15,754	15,209	15,314	16,281
Pennsylvania .....	6,319	6,267	6,379	6,700	6,512	6,411	5,970	6,072	6,498
East North Central .....	16,900	16,978	16,687	17,400	17,752	17,459	18,108	18,593	20,191
Illinois .....	4,170	4,284	4,575	4,331	4,492	4,460	4,682	4,831	5,194
Indiana .....	2,271	1,508	1,044	1,556	1,554	1,452	1,653	1,829	1,948
Michigan .....	3,527	3,626	3,652	3,753	3,898	3,807	4,282	4,605	4,821
Ohio .....	5,197	5,804	5,681	5,987	5,985	5,989	5,749	5,859	6,308
Wisconsin .....	1,735	1,758	1,735	1,773	1,823	1,751	1,742	1,469	1,920
West North Central .....	5,568	5,739	6,722	6,834	6,991	7,024	7,245	7,206	7,768
Iowa .....	815	859	874	957	958	923	824	958	1,009
Kansas .....	943	1,247	1,826	1,793	1,932	1,931	2,011	1,975	2,175
Minnesota .....	959	822	1,041	909	813	814	910	941	931
Missouri .....	2,038	2,060	2,169	2,345	2,441	2,490	2,501	2,405	2,592
Nebraska .....	440	386	405	440	446	457	538	503	614
North Dakota .....	167	180	181	159	128	144	165	131	159
South Dakota .....	206	185	226	231	273	265	296	295	288
South Atlantic .....	16,339	17,654	18,995	19,963	21,269	21,194	20,919	21,993	23,327
Delaware .....	404	413	388	389	446	354	284	204	372
District of Columbia .....	4,728	5,140	5,147	5,724	5,779	5,098	4,825	4,732	4,842
Florida .....	3,113	3,040	3,597	3,569	4,365	4,821	4,745	5,653	6,164
Georgia .....	1,231	1,485	1,516	1,600	1,822	1,793	1,858	1,693	2,009
Maryland .....	2,138	2,351	2,433	2,431	2,369	2,665	2,675	2,726	2,785
North Carolina .....	1,360	1,440	1,431	1,457	1,544	1,350	1,371	1,391	1,465
South Carolina .....	819	894	835	946	1,031	939	978	1,029	1,068
Virginia .....	2,096	2,413	3,161	3,361	3,383	3,559	3,614	3,962	3,973
West Virginia .....	450	478	487	486	530	615	589	603	649
East South Central .....	3,806	3,999	4,204	4,353	4,459	4,759	5,286	5,260	5,807
Alabama .....	892	1,050	1,182	1,226	1,399	1,457	1,598	1,977	2,182
Kentucky .....	927	871	861	889	971	1,020	1,131	1,011	1,140
Mississippi .....	402	543	586	520	513	577	625	404	473
Tennessee .....	1,585	1,535	1,575	1,718	1,576	1,705	1,932	1,868	2,012
West South Central .....	9,853	9,811	10,063	9,932	10,080	10,543	11,053	11,596	13,196
Arkansas .....	333	357	398	375	465	375	300	298	656
Louisiana .....	1,218	1,062	1,001	908	778	802	814	911	1,094
Oklahoma .....	945	905	1,381	1,277	1,772	1,745	1,827	1,862	2,122
Texas .....	7,357	7,487	7,283	7,372	7,065	7,621	8,112	8,525	9,324
Mountain .....	5,546	5,725	6,474	6,528	6,600	6,593	6,971	7,325	8,210
Arizona .....	1,867	1,884	2,175	1,852	1,945	1,820	2,054	2,299	2,340
Colorado .....	1,403	1,341	1,419	1,837	1,744	1,854	1,947	1,983	2,641
Idaho .....	351	409	480	452	512	568	634	717	672
Montana .....	70	83	119	116	132	143	160	140	172
Nevada .....	142	129	119	95	116	196	183	372	153
New Mexico .....	767	724	745	730	737	816	897	754	856
Utah .....	905	1,032	1,126	1,170	1,223	1,028	944	919	1,138
Wyoming .....	41	123	291	276	191	166	172	141	238
Pacific .....	11,279	11,406	12,513	12,309	12,123	11,547	10,539	9,358	9,178
Alaska .....	99	7	169	97	164	180	98	161	151
California .....	9,169	9,319	10,356	10,275	9,864	9,255	8,436	7,046	6,824
Hawaii .....	280	242	238	250	295	307	318	326	325
Oregon .....	554	801	557	565	624	676	683	738	805
Washington .....	1,177	1,237	1,193	1,122	1,176	1,129	1,004	1,087	1,073
Outlying areas .....	761	730	775	787	750	760	760	688	726

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table C-25. Science and engineering postdoctoral appointees in doctorate-granting institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields .....	20,719	21,522	22,408	23,749	24,831	26,141	28,059	29,111	31,553
Total, science/engineering fields .....	15,657	16,168	16,920	17,901	18,760	19,759	20,962	21,604	23,018
Engineering, total .....	1,101	1,194	1,347	1,396	1,441	1,684	1,908	1,943	2,237
Aerospace .....	32	42	51	48	43	48	38	67	77
Agricultural .....	4	8	15	17	29	31	38	31	33
Biomedical .....	28	34	47	52	44	47	87	71	66
Chemical .....	198	245	273	295	309	423	486	551	578
Civil .....	131	148	122	140	175	203	182	168	185
Electrical .....	174	171	176	172	175	186	193	241	300
Engineering science .....	71	63	90	67	41	38	74	78	117
Industrial .....	13	21	18	25	28	32	32	8	27
Mechanical .....	182	196	207	239	218	216	302	218	329
Metallurgical/materials .....	204	168	245	250	283	325	323	370	401
Mining .....	19	18	19	25	28	63	90	19	11
Nuclear .....	15	19	31	31	20	17	36	30	29
Petroleum .....	1	4	6	1	10	8	9	12	18
Engineering, n.e.c. ....	29	59	47	34	44	47	58	83	66
Sciences, total .....	14,556	14,974	15,573	16,505	17,319	18,075	19,054	19,661	20,781
Physical sciences .....	4,444	4,386	4,517	4,843	4,953	5,167	5,355	5,507	5,623
Astronomy .....	111	118	138	133	125	147	186	184	210
Chemistry .....	2,973	2,908	2,995	3,151	3,246	3,429	3,482	3,580	3,627
Physics .....	1,350	1,320	1,342	1,527	1,548	1,578	1,878	1,715	1,763
Physical sciences, n.e.c. ....	10	42	42	32	34	33	29	28	23
Earth, atmospheric, & ocean sciences .....	415	488	375	417	420	499	459	605	645
Atmospheric sciences .....	41	74	48	43	58	71	58	57	59
Geosciences .....	237	250	228	247	239	279	274	359	391
Oceanography .....	120	151	79	98	81	116	107	168	161
Earth, atmos., & ocean sci., n.e.c. ....	17	13	22	29	42	33	20	21	34
Mathematical sciences .....	170	203	226	201	228	280	223	247	206
Computer sciences .....	82	63	74	74	100	91	78	71	157
Agricultural sciences .....	307	375	373	409	441	454	512	529	574
Biological sciences .....	8,355	8,707	9,164	9,722	10,348	10,752	11,518	11,799	12,848
Anatomy .....	284	282	310	342	330	382	468	471	521
Biochemistry .....	1,748	1,783	1,858	1,985	2,113	2,078	2,216	2,160	2,123
Biology .....	1,010	1,125	1,128	1,088	1,176	1,225	1,283	1,336	1,398
Biometry/epidemiology .....	54	87	59	93	74	70	100	97	95
Biophysics .....	183	121	101	133	116	124	138	118	156
Botany .....	357	330	355	373	408	443	445	433	475
Cell biology .....	853	648	723	812	899	894	977	1,213	1,282
Ecology .....	39	36	37	37	39	33	52	57	49
Entomology/parasitology .....	112	113	139	143	182	176	219	212	238
Genetics .....	344	382	377	428	493	504	535	596	876
Microbiology .....	1,025	1,071	1,168	1,255	1,308	1,405	1,539	1,473	1,802
Nutrition .....	150	150	202	185	177	141	130	134	175
Pathology .....	584	607	619	709	708	819	899	999	1,092
Pharmacology .....	801	816	855	880	902	991	1,033	1,079	1,153
Physiology .....	754	817	833	896	1,019	1,034	1,067	1,043	1,057
Zoology .....	183	157	212	217	214	209	214	183	163
Biosciences, n.e.c. ....	74	202	188	148	208	224	203	215	195
Psychology .....	435	422	495	517	454	493	535	457	503
Social sciences .....	348	330	349	322	377	319	374	446	425
Agricultural economics .....	28	18	31	35	31	20	28	57	64
Anthropology .....	60	57	57	52	54	56	74	84	50
Economics (except agricultural) .....	20	26	19	22	35	9	33	37	40
Geography .....	7	14	10	11	16	22	22	19	25
History and philosophy of science .....	19	12	11	11	19	16	12	18	19
Linguistics .....	51	30	26	21	42	36	30	38	14
Political science .....	43	31	44	66	54	49	41	66	84
Sociology .....	99	114	92	84	93	73	83	104	99
Sociology/anthropology .....	1	0	2	1	3	1	0	2	1
Social sciences, n.e.c. ....	20	28	57	19	29	37	51	41	29
Total, health fields .....	5,062	5,354	5,488	5,848	6,071	6,382	7,097	7,507	8,535
Dentistry .....	190	173	201	89	64	87	38	27	117
Neurology .....	301	352	327	365	420	478	463	530	598
Nursing .....	6	14	17	18	49	30	32	19	28
Pharmaceutical sciences .....	241	269	318	384	407	484	549	445	482
Preventive medicine/community health .....	157	186	177	215	182	162	192	216	228
Speech pathology/audiology .....	18	18	18	12	25	26	28	28	41
Veterinary sciences .....	50	78	69	100	112	132	111	102	126
Clinical medicine, n.e.c. ....	4,021	4,166	4,283	4,587	4,735	4,899	5,586	6,017	8,813
Health related, n.e.c. ....	78	78	78	80	77	84	98	123	102

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table C-26. Science and engineering postdoctoral appointees in doctorate-granting institutions, by geographic distribution: 1983-91**

Page 1 of 1

Division and State	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all institutions .....	20,719	21,522	22,408	23,749	24,831	26,141	28,059	29,111	31,553
New England .....	3,202	3,527	3,490	3,739	3,852	3,866	4,081	4,536	4,845
Connecticut .....	743	816	814	802	837	853	875	957	1,009
Maine .....	9	12	15	18	18	18	16	14	11
Massachusetts .....	2,293	2,523	2,465	2,689	2,761	2,758	2,934	3,288	3,550
New Hampshire .....	49	42	43	49	66	48	58	71	81
Rhode Island .....	57	82	100	123	111	129	121	128	118
Vermont .....	51	52	53	58	59	60	77	78	76
Middle Atlantic .....	3,557	3,579	3,725	3,917	3,918	4,219	4,497	4,624	4,959
New Jersey .....	353	341	398	448	502	519	576	566	624
New York .....	2,209	2,249	2,339	2,369	2,238	2,440	2,579	2,646	2,784
Pennsylvania .....	995	989	988	1,100	1,178	1,260	1,342	1,410	1,551
East North Central .....	2,693	2,837	2,935	3,162	3,237	3,419	3,851	3,931	4,365
Illinois .....	864	919	909	1,001	1,041	1,100	1,150	1,162	1,267
Indiana .....	405	438	505	400	421	419	519	598	654
Michigan .....	493	502	479	571	629	681	811	783	878
Ohio .....	485	508	530	644	657	708	835	882	977
Wisconsin .....	446	470	512	546	489	511	536	526	589
West North Central .....	1,316	1,310	1,345	1,411	1,540	1,652	1,754	1,761	2,065
Iowa .....	266	254	255	283	305	317	362	364	463
Kansas .....	165	143	167	191	200	224	207	219	204
Minnesota .....	363	364	390	386	427	446	474	492	561
Missouri .....	438	459	442	445	487	540	582	542	889
Nebraska .....	57	66	69	78	89	93	99	109	115
North Dakota .....	20	20	18	21	26	26	23	23	29
South Dakota .....	7	4	4	7	6	6	7	12	4
South Atlantic .....	2,429	2,597	2,849	2,963	3,154	3,365	3,601	3,619	3,985
Delaware .....	30	31	34	37	14	39	41	58	66
District of Columbia .....	114	95	124	137	134	134	117	101	156
Florida .....	313	344	394	387	414	449	528	583	563
Georgia .....	253	258	248	285	301	319	362	393	407
Maryland .....	653	755	804	872	974	919	971	936	1,019
North Carolina .....	608	655	709	707	771	901	988	947	1,032
South Carolina .....	93	87	92	105	102	89	79	128	175
Virginia .....	333	334	406	388	397	465	455	422	508
West Virginia .....	32	38	38	45	47	50	60	51	59
East South Central .....	571	601	653	783	878	924	992	940	1,141
Alabama .....	155	166	200	245	248	267	299	299	350
Kentucky .....	148	154	153	170	162	176	170	140	267
Mississippi .....	39	41	47	48	58	68	73	88	62
Tennessee .....	229	240	253	320	410	413	450	413	462
West South Central .....	1,527	1,622	1,662	1,776	1,968	2,097	2,076	2,110	2,246
Arkansas .....	29	30	26	29	42	46	32	32	44
Louisiana .....	173	170	164	181	224	218	234	241	310
Oklahoma .....	118	129	133	114	126	94	115	127	136
Texas .....	1,207	1,293	1,339	1,452	1,576	1,739	1,695	1,710	1,756
Mountain .....	988	972	1,059	1,107	1,061	1,114	1,304	1,262	1,396
Arizona .....	275	295	283	310	303	300	342	331	388
Colorado .....	386	350	445	474	386	411	486	462	559
Idaho .....	17	10	24	23	22	24	27	44	36
Montana .....	34	23	17	19	24	28	34	37	35
Nevada .....	22	18	21	22	27	32	39	44	38
New Mexico .....	41	55	47	51	75	75	98	74	77
Utah .....	201	200	214	197	206	219	248	245	239
Wyoming .....	12	21	8	11	18	25	30	25	24
Pacific .....	4,425	4,467	4,689	4,887	5,194	5,482	5,896	6,320	6,545
Alaska .....	3	18	7	1	0	6	6	7	3
California .....	3,676	3,693	3,888	4,073	4,317	4,580	4,998	5,176	5,343
Hawaii .....	30	39	23	31	39	27	43	68	50
Oregon .....	173	172	178	188	196	205	177	180	217
Washington .....	543	545	593	614	642	664	672	889	932
Outlying areas .....	11	10	1	4	29	3	7	8	6

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table C-27. Science and engineering postdoctoral appointees supported by Federal sources  
in doctorate-granting institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields	14,993	15,691	16,126	16,941	17,612	18,210	19,611	20,100	21,876
Total, science/engineering fields	11,929	12,511	12,847	13,503	13,944	14,377	15,320	15,696	16,949
Engineering, total	759	819	899	911	982	1,092	1,205	1,255	1,488
Aerospace	28	38	36	35	38	43	35	54	55
Agricultural	1	5	7	11	16	18	21	16	18
Biomedical	26	29	37	47	42	40	51	51	53
Chemical	101	128	153	153	172	215	270	297	323
Civil	91	94	80	91	116	132	102	107	131
Electrical	96	132	124	128	126	131	151	161	202
Engineering science	64	55	76	58	34	33	62	60	93
Industrial	7	0	12	14	19	24	17	4	10
Mechanical	157	160	131	148	147	154	201	156	237
Metallurgical/materials	149	127	179	177	215	237	219	244	273
Mining	1	0	0	3	5	12	8	16	8
Nuclear	13	15	24	24	16	14	24	21	22
Petroleum	1	3	3	0	3	3	3	9	16
Engineering, n.e.c.	24	33	37	22	33	36	41	59	47
Sciences, total	11,170	11,692	11,948	12,592	12,962	13,285	14,115	14,441	15,461
Physical sciences	3,758	3,765	3,736	4,018	3,953	4,022	4,293	4,393	4,457
Astronomy	91	104	117	111	112	126	166	168	198
Chemistry	2,493	2,473	2,424	2,556	2,496	2,587	2,699	2,777	2,776
Physics	1,165	1,150	1,155	1,322	1,312	1,280	1,405	1,424	1,467
Physical sciences, n.e.c.	9	38	40	29	33	29	23	24	16
Earth, atmospheric, & ocean sciences	314	350	292	321	321	398	388	487	505
Atmospheric sciences	39	69	43	42	58	67	55	51	48
Geosciences	166	170	175	190	170	204	225	274	287
Oceanography	98	103	60	73	68	104	94	145	144
Earth, atmos. & ocean sci., n.e.c.	11	8	14	16	25	23	14	17	26
Mathematical sciences	83	132	120	114	129	188	141	158	143
Computer sciences	47	48	48	64	77	59	62	57	117
Agricultural sciences	178	220	206	213	246	244	298	283	370
Biological sciences	6,285	6,671	7,006	7,318	7,737	7,889	8,387	8,534	9,317
Anatomy	221	215	239	254	258	302	368	387	423
Biochemistry	1,377	1,404	1,477	1,505	1,620	1,556	1,647	1,654	1,615
Biology	764	922	931	881	946	959	1,012	1,010	1,139
Biometry/epidemiology	34	54	46	68	50	50	71	70	75
Biophysics	167	111	88	118	102	89	96	79	105
Botany	249	224	264	242	262	280	277	284	352
Cell biology	507	471	487	587	637	651	687	863	901
Ecology	32	25	33	26	35	30	45	38	37
Entomology/parasitology	75	85	91	105	110	108	157	136	164
Genetics	246	260	256	291	341	317	339	379	441
Microbiology	754	818	895	942	958	998	1,093	1,058	1,291
Nutrition	81	92	125	135	124	90	58	62	90
Pathology	384	432	417	485	470	563	607	621	686
Pharmacology	607	638	665	666	695	758	799	822	911
Physiology	584	609	660	730	808	810	815	791	792
Zoology	144	127	170	176	166	149	156	113	129
Biosciences, n.e.c.	60	178	162	127	155	179	160	167	166
Psychology	332	327	387	405	341	360	379	344	365
Social sciences	172	179	153	139	158	125	167	185	187
Agricultural economics	20	15	20	27	22	13	16	28	41
Anthropology	27	25	26	14	16	13	22	16	19
Economics (except agricultural)	8	12	13	4	9	4	10	12	1
Geography	2	9	4	3	14	16	19	15	14
History and philosophy of science	9	7	5	1	4	5	3	3	7
Linguistics	6	9	7	8	7	7	7	10	8
Political science	16	13	8	12	12	9	26	24	27
Sociology	79	82	61	62	57	39	42	56	52
Sociology/anthropology	0	0	1	0	1	0	0	0	0
Social sciences, n.e.c.	5	7	8	8	16	19	22	21	18
Total, health fields	3,064	3,180	3,279	3,438	3,668	3,833	4,291	4,404	4,927
Dentistry	90	84	91	34	39	65	29	11	68
Neurology	211	228	210	216	266	328	301	344	370
Nursing	1	3	9	10	44	15	18	19	26
Pharmaceutical sciences	168	211	260	298	314	367	406	325	341
Preventive medicine/community health	101	127	113	137	112	100	138	156	164
Speech pathology/audiology	15	15	15	12	23	21	23	26	38
Veterinary sciences	33	49	35	56	74	93	64	67	71
Clinical medicine, n.e.c.	2,403	2,408	2,499	2,631	2,747	2,790	3,256	3,404	3,798
Health related, n.e.c.	42	55	47	44	49	54	58	52	51

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



**Table C-28. Science and engineering postdoctoral appointees supported by non-Federal sources  
in doctorate-granting institutions, by field: 1983-91**

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields	5,726	5,831	6,282	6,808	7,219	7,931	8,448	9,011	9,677
Total, science/engineering fields	3,728	3,657	4,073	4,398	4,816	5,382	5,642	5,908	6,069
Engineering, total	342	375	448	485	459	592	703	688	749
Aerospace	4	4	15	13	5	5	3	13	22
Agricultural	3	3	8	6	13	13	17	15	15
Biomedical	2	5	10	5	2	7	16	20	13
Chemical	97	117	120	142	137	208	196	254	255
Civil	40	52	42	49	59	71	80	61	54
Electrical	78	39	52	44	49	55	42	80	98
Engineering science	7	8	14	9	7	5	12	16	24
Industrial	6	21	6	11	7	8	15	2	17
Mechanical	25	36	76	91	69	62	101	62	92
Metallurgical/materials	55	41	66	73	68	88	104	126	128
Mining	18	18	19	22	21	51	82	3	3
Nuclear	2	4	7	7	4	3	12	9	7
Petroleum	0	1	3	1	7	5	6	3	2
Engineering, n.e.c.	5	26	10	12	11	11	17	24	19
Sciences, total	3,386	3,282	3,625	3,913	4,357	4,790	4,939	5,220	5,320
Physical sciences	686	621	761	825	1,000	1,165	1,062	1,114	1,166
Astronomy	20	14	21	22	13	21	20	16	12
Chemistry	480	433	571	595	750	842	763	803	851
Physics	185	170	187	205	236	298	273	291	296
Physical sciences, n.e.c.	1	4	2	3	1	4	6	4	7
Earth, atmospheric, & ocean sciences	101	138	83	96	99	101	71	118	140
Atmospheric sciences	2	5	5	1	0	4	3	6	11
Geosciences	71	80	51	57	69	75	49	85	104
Oceanography	22	48	19	25	13	12	13	23	17
Earth, atmos., & ocean sci., n.e.c.	6	5	8	13	17	10	6	4	8
Mathematical sciences	87	71	106	87	99	92	82	89	63
Computer sciences	35	15	23	10	23	32	16	14	40
Agricultural sciences	129	155	167	196	195	210	214	246	204
Biological sciences	2,069	2,036	2,158	2,404	2,609	2,863	3,131	3,265	3,331
Anatomy	63	67	71	88	72	80	100	84	98
Biochemistry	371	379	381	480	493	522	569	506	508
Biology	246	197	197	227	230	266	271	326	259
Biometry/epidemiology	20	13	13	25	24	20	29	27	20
Biophysics	16	10	13	15	14	35	42	39	51
Botany	108	106	91	131	146	163	168	149	123
Cell biology	146	177	236	225	262	243	290	350	381
Ecology	7	11	4	11	4	3	7	19	12
Entomology/parasitology	37	28	48	38	52	68	62	76	72
Genetics	98	122	121	137	152	187	196	217	235
Microbiology	271	253	273	313	350	407	446	415	511
Nutrition	69	58	77	50	53	51	72	72	85
Pathology	200	175	202	224	238	256	292	378	406
Pharmacology	194	178	190	214	207	233	234	257	242
Physiology	170	208	173	166	211	224	252	252	265
Zoology	39	30	42	41	48	60	58	50	34
Biosciences, n.e.c.	14	24	26	19	53	45	43	48	29
Psychology	103	95	108	112	113	133	156	113	138
Social sciences	176	151	196	183	219	194	207	261	238
Agricultural economics	8	3	11	8	9	7	12	29	23
Anthropology	33	32	31	38	38	43	52	48	31
Economics (except agricultural)	12	14	6	18	27	5	23	25	39
Geography	5	5	6	8	2	6	3	4	11
History and philosophy of science	10	5	6	10	15	11	9	15	12
Linguistics	45	21	19	13	35	29	23	28	6
Political science	27	18	36	54	42	40	15	42	57
Sociology	20	32	31	22	36	34	41	48	47
Sociology/anthropology	1	0	1	1	2	1	0	2	1
Social sciences, n.e.c.	15	21	49	11	13	18	29	20	11
Total, health fields	1,998	2,174	2,209	2,410	2,403	2,549	2,806	3,103	3,608
Dentistry	100	89	110	55	25	22	9	16	49
Neurology	90	124	117	149	154	150	162	186	228
Nursing	5	11	8	6	5	15	14	0	2
Pharmaceutical sciences	73	58	58	86	93	117	143	120	141
Preventive medicine/community health	56	59	64	78	70	62	56	80	64
Speech pathology/audiology	3	3	3	0	2	5	5	2	3
Veterinary sciences	17	29	34	44	38	39	47	35	55
Clinical medicine, n.e.c.	1,618	1,778	1,784	1,956	1,988	2,109	2,330	2,613	3,015
Health related, n.e.c.	36	23	31	36	28	30	40	71	51

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table C-29. Science and engineering postdoctoral appointees with U.S. citizenship in doctorate-granting institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields .....	13,196	13,540	13,530	14,057	14,097	14,424	14,941	14,885	15,590
Total, science/engineering fields .....	9,469	9,677	9,731	10,104	10,309	10,475	10,727	10,584	10,902
Engineering, total .....	410	435	440	458	496	585	651	603	607
Aero. space .....	8	10	10	15	13	20	14	21	29
Agricultural .....	3	4	6	4	7	12	11	12	16
Biomedical .....	20	21	27	36	32	26	29	37	25
Chemical .....	55	65	55	63	67	100	117	157	128
Civil .....	52	53	49	46	57	91	80	77	69
Electrical .....	67	61	76	59	103	70	58	78	68
Engineering science .....	39	25	41	28	20	23	28	29	49
Industrial .....	6	12	16	19	19	23	17	3	9
Mechanical .....	69	82	61	94	69	76	100	66	101
Metallurgical/materials .....	53	52	47	56	71	72	86	89	80
Mining .....	18	18	19	19	20	53	80	1	0
Nuclear .....	6	7	12	9	7	6	13	9	8
Petroleum .....	1	1	1	0	1	0	2	4	4
Engineering, n.e.c. ....	13	24	20	10	10	13	16	20	21
Sciences, total .....	9,059	9,242	9,291	9,646	9,813	9,890	10,076	9,981	10,295
Physical sciences .....	2,059	1,974	2,016	2,203	2,175	2,256	2,268	2,192	2,184
Astronomy .....	85	86	95	88	76	90	109	112	126
Chemistry .....	1,306	1,250	1,277	1,292	1,253	1,328	1,356	1,308	1,291
Physics .....	661	612	609	796	817	812	778	749	757
Physical sciences, n.e.c. ....	7	26	35	27	29	26	23	23	10
Earth, atmospheric, & ocean sciences .....	256	324	250	276	258	311	279	388	409
Atmospheric sciences .....	20	51	33	32	41	41	35	31	28
Geosciences .....	137	142	136	158	134	168	161	218	250
Oceanography .....	89	121	64	67	56	82	73	126	110
Earth, atmos., & ocean sci., n.e.c. ....	10	10	17	19	27	20	10	13	21
Mathematical sciences .....	80	103	112	100	118	147	94	98	92
Computer sciences .....	37	42	45	45	65	52	42	40	110
Agricultural sciences .....	223	268	227	241	274	304	309	326	327
Biological sciences .....	5,795	5,923	5,972	6,109	6,252	6,159	6,395	6,312	6,493
Anatomy .....	210	218	234	239	209	230	281	244	254
Biochemistry .....	1,109	1,080	1,033	1,161	1,206	1,104	1,148	1,026	973
Biology .....	738	836	848	722	796	784	847	786	783
Biometry/epidemiology .....	34	58	46	59	50	50	61	70	63
Biophysics .....	122	74	72	79	59	61	64	46	72
Botany .....	260	248	256	268	289	300	279	252	271
Cell biology .....	484	444	486	514	559	551	552	696	700
Ecology .....	35	32	29	28	32	25	39	39	33
Entomology/parasitology .....	82	92	103	98	118	110	130	138	151
Genetics .....	244	266	263	285	332	313	328	368	386
Microbiology .....	736	743	738	744	742	794	847	789	937
Nutrition .....	101	91	119	100	99	60	48	51	66
Pathology .....	415	437	397	439	416	439	466	582	586
Pharmacology .....	493	501	535	540	475	491	493	485	508
Physiology .....	537	552	532	567	599	578	572	533	522
Zoology .....	151	129	179	176	162	159	159	111	100
Biosciences, n.e.c. ....	44	122	102	90	109	110	81	96	68
Psychology .....	374	375	441	467	381	420	433	374	402
Social sciences .....	235	232	228	205	290	241	258	251	278
Agricultural economics .....	20	14	21	17	14	14	17	26	34
Anthropology .....	51	48	49	38	50	48	55	44	44
Economics (except agricultural) .....	9	12	10	7	21	6	18	7	14
Geography .....	0	7	2	2	13	19	19	16	18
History and philosophy of science .....	11	5	6	7	13	11	7	12	12
Linguistics .....	22	17	15	12	33	15	10	17	11
Political science .....	27	14	14	43	44	39	28	36	47
Sociology .....	84	97	70	68	74	57	63	68	74
Sociology/anthropology .....	0	0	0	1	3	0	0	1	1
Social sciences, n.e.c. ....	11	18	41	10	25	32	41	24	23
Total, health fields .....	3,727	3,863	3,799	3,953	3,788	3,949	4,214	4,301	4,688
Dentistry .....	125	116	141	53	36	64	9	14	59
Neurology .....	215	248	221	229	241	285	262	272	304
Nursing .....	6	14	16	16	48	30	31	19	28
Pharmaceutical sciences .....	110	108	123	170	136	185	212	170	178
Preventive medicine/community health .....	133	147	140	153	134	115	119	142	153
Speech pathology/audiology .....	16	17	16	10	23	22	21	19	29
Veterinary sciences .....	45	68	51	68	80	98	79	63	79
Clinical medicine, n.e.c. ....	3,014	3,082	3,028	3,195	3,031	3,094	3,419	3,522	3,777
Health related, n.e.c. ....	63	63	63	59	59	56	62	80	81

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table C-30. Science and engineering postdoctoral appointees without U.S. citizenship in doctorate-granting institutions, by field: 1983-91**

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields .....	7,523	7,982	8,878	9,692	10,734	11,717	13,118	14,226	15,963
Total, science/engineering fields .....	6,188	6,491	7,189	7,797	8,451	9,284	10,235	11,020	12,118
Engineering, total .....	891	759	907	938	945	1,099	1,257	1,340	1,830
Aerospace .....	24	32	41	33	30	28	24	48	48
Agricultural .....	1	4	9	13	22	19	27	19	17
Biomedical .....	8	13	20	16	12	21	38	34	41
Chemical .....	143	180	218	232	242	323	349	394	450
Civil .....	79	93	73	94	118	112	102	91	116
Electrical .....	107	110	100	113	72	116	135	163	232
Engineering science .....	32	38	49	39	21	15	46	47	68
Industrial .....	7	9	2	6	7	9	15	3	18
Mechanical .....	113	114	146	145	147	140	202	152	228
Metallurgical/materials .....	151	116	198	194	212	253	237	281	321
Mining .....	1	0	0	6	6	10	10	18	11
Nuclear .....	9	12	19	22	13	11	23	21	21
Petroleum .....	0	3	5	1	9	8	7	8	14
Engineering, n.e.c. ....	18	35	27	24	34	34	42	63	45
Sciences, total .....	5,497	5,732	6,282	6,859	7,506	8,185	8,978	9,680	10,486
Physical sciences .....	2,385	2,412	2,501	2,840	2,778	2,931	3,089	3,315	3,439
Astronomy .....	26	32	43	45	49	57	77	72	84
Chemistry .....	1,887	1,858	1,718	1,859	1,993	2,101	2,106	2,272	2,338
Physics .....	689	708	733	731	731	766	900	966	1,006
Physical sciences, n.e.c. ....	3	18	7	5	5	7	6	5	13
Earth, atmospheric, & ocean sciences .....	159	164	125	141	162	188	180	217	236
Atmospheric sciences .....	21	23	15	11	17	30	23	26	31
Geosciences .....	100	108	90	89	105	111	113	141	141
Oceanography .....	31	30	15	31	25	34	34	42	51
Earth, atmos., & ocean sci., n.e.c. ....	7	3	5	10	15	13	10	8	13
Mathematical sciences .....	90	100	114	101	110	133	129	149	114
Computer sciences .....	45	21	29	29	35	39	36	31	47
Agricultural sciences .....	84	107	148	168	167	150	203	203	247
Biological sciences .....	2,560	2,784	3,192	3,813	4,094	4,593	5,123	5,487	6,155
Anatomy .....	74	64	76	103	121	152	187	227	267
Biochemistry .....	839	703	825	824	907	974	1,089	1,134	1,150
Biology .....	272	289	280	368	380	441	436	550	615
Biometry/epidemiology .....	20	9	13	34	24	20	39	27	32
Biophysics .....	81	47	29	54	57	63	74	72	84
Botany .....	97	82	99	105	119	143	166	181	204
Cell biology .....	189	204	237	298	340	343	425	517	582
Ecology .....	4	4	8	9	7	8	13	18	18
Entomology/parasitology .....	30	21	36	45	44	66	89	74	85
Genetics .....	100	116	114	143	181	191	207	228	290
Microbiology .....	289	328	430	511	566	611	692	684	865
Nutrition .....	49	59	83	85	78	81	82	83	109
Pathology .....	169	170	222	270	292	380	433	417	506
Pharmacology .....	308	315	320	340	427	500	540	594	645
Physiology .....	217	285	301	329	420	456	495	510	535
Zoology .....	32	28	33	41	52	50	55	52	63
Biosciences, n.e.c. ....	30	80	86	56	99	114	122	119	107
Psychology .....	81	46	54	50	73	73	102	83	101
Social sciences .....	113	98	121	117	87	78	116	195	147
Agricultural economics .....	8	4	10	18	17	8	11	31	30
Anthropology .....	9	9	8	14	4	8	19	20	6
Economics (except agricultural) .....	11	14	9	15	15	3	15	30	26
Geography .....	7	7	6	9	3	3	3	3	7
History and philosophy of science .....	8	7	5	4	6	5	5	6	7
Linguistics .....	29	13	11	9	9	21	20	21	3
Political science .....	18	17	30	23	10	10	13	30	37
Sociology .....	15	17	22	18	19	18	20	36	25
Sociology/anthropology .....	1	0	2	0	0	1	0	1	0
Social sciences, n.e.c. ....	9	10	16	9	4	5	10	17	6
Total, health fields .....	1,335	1,491	1,689	1,895	2,283	2,433	2,883	3,206	3,847
Dentistry .....	65	57	60	38	28	23	29	13	58
Neurology .....	86	104	106	136	179	193	201	258	294
Nursing .....	0	0	1	0	1	0	1	0	0
Pharmaceutical sciences .....	131	181	195	214	271	299	337	275	304
Preventive medicine/community health .....	24	39	37	62	48	47	73	74	75
Speech pathology/audiology .....	2	1	2	2	2	4	7	9	12
Veterinary sciences .....	5	10	18	32	32	34	32	39	47
Clinical medicine, n.e.c. ....	1,007	1,104	1,255	1,392	1,704	1,805	2,187	2,495	3,036
Health related, n.e.c. ....	15	15	15	21	18	28	36	43	21

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table C-31. Nonfaculty scientists and engineers in doctorate-granting institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields	4,867	5,017	5,098	4,846	4,583	4,864	4,899	5,190	5,486
Total, science/engineering fields	3,947	4,002	4,144	3,871	3,674	3,897	4,029	4,306	4,563
Engineering, total	630	586	612	519	438	585	580	606	682
Aerospace	24	22	21	34	28	21	14	24	25
Agricultural	4	10	4	1	2	9	19	13	12
Biomedical	11	12	14	5	4	7	18	9	16
Chemical	50	60	76	75	48	76	75	77	61
Civil	86	51	31	33	38	39	37	51	54
Electrical	126	148	148	87	61	115	114	103	120
Engineering science	36	47	29	27	24	20	19	17	16
Industrial	10	9	3	2	13	7	11	21	20
Mechanical	128	84	112	83	85	107	89	128	139
Metallurgical/materials	94	100	131	128	96	124	120	103	146
Mining	3	0	0	1	1	0	0	1	3
Nuclear	29	19	26	28	24	27	38	36	34
Petroleum	4	6	5	1	2	1	1	5	13
Engineering, n.e.c.	25	18	12	14	12	11	25	18	22
Sciences, total	3,317	3,416	3,532	3,352	3,236	3,332	3,449	3,700	3,881
Physical sciences	756	853	962	924	848	958	986	935	1,022
Astronomy	67	86	78	58	69	81	68	87	86
Chemistry	304	377	396	411	367	432	465	444	507
Physics	383	408	485	450	409	444	452	460	448
Physical sciences, n.e.c.	2	2	3	5	3	1	1	4	1
Earth, atmospheric, & ocean sciences	305	242	184	190	197	196	226	314	303
Atmospheric sciences	47	46	42	39	44	18	10	19	26
Geosciences	134	130	87	98	114	108	118	135	129
Oceanography	111	44	38	38	37	65	81	137	141
Earth, atmos., & ocean sci., n.e.c.	13	22	17	15	2	5	17	23	7
Mathematical sciences	125	125	176	54	69	88	64	88	77
Computer sciences	58	56	77	97	122	95	68	61	49
Agricultural sciences	170	135	122	152	114	114	140	188	208
Biological sciences	1,563	1,607	1,660	1,591	1,548	1,609	1,698	1,724	1,850
Anatomy	60	53	62	59	79	64	78	56	42
Biochemistry	275	269	333	280	290	305	362	329	351
Biology	306	302	285	349	319	314	242	268	251
Biometry/epidemiology	23	24	24	12	13	38	19	21	31
Biophysics	24	42	24	16	11	8	19	31	36
Botany	70	64	62	59	64	75	73	72	122
Cell biology	44	68	93	82	94	133	163	122	147
Ecology	9	14	13	17	22	21	31	13	26
Entomology/parasitology	61	63	60	47	31	37	36	86	78
Genetics	40	43	68	64	80	47	53	57	70
Microbiology	146	110	139	166	132	132	120	166	150
Nutrition	49	60	41	47	45	56	63	77	86
Pathology	75	84	97	66	81	91	103	113	102
Pharmacology	158	169	163	147	98	93	123	132	150
Physiology	157	157	130	126	135	147	172	122	145
Zoology	39	61	47	37	37	28	28	40	40
Biosciences, n.e.c.	25	24	19	17	17	20	13	19	23
Psychology	157	220	208	214	254	171	179	197	193
Social sciences	183	178	143	130	84	101	79	133	179
Agricultural economics	29	14	10	11	4	5	6	17	13
Anthropology	38	41	37	46	32	25	30	46	60
Economics (except agricultural)	42	42	32	1	1	0	0	8	6
Geography	9	7	4	6	1	1	4	4	4
History and philosophy of science	0	0	1	2	4	6	3	4	1
Linguistics	2	26	11	19	19	16	8	25	49
Political science	25	9	12	15	2	27	15	5	3
Sociology	19	26	31	27	18	17	5	23	26
Sociology/anthropology	1	0	0	0	0	0	0	0	0
Social sciences, n.e.c.	18	13	5	3	3	4	8	1	17
Total, health fields	920	1,015	954	975	909	967	870	884	923
Dentistry	81	62	66	12	11	4	9	8	16
Neurology	45	62	68	80	67	95	81	73	77
Nursing	7	5	26	12	7	4	3	6	2
Pharmaceutical sciences	57	45	51	42	55	60	46	31	83
Preventive medicine/community health	54	46	36	39	30	45	42	69	44
Speech pathology/audiology	23	24	8	13	17	9	20	20	7
Veterinary sciences	27	26	32	28	29	19	28	34	30
Clinical medicine, n.e.c.	617	703	634	729	672	662	625	618	640
Health related, n.e.c.	9	22	33	20	21	69	18	25	24

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table C-32. Nonfaculty scientists and engineers in doctorate-granting institutions, by geographic distribution: 1983-91**

Page 1 of 1

Division and State	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all institutions .....	4,867	5,017	5,098	4,846	4,583	4,864	4,899	5,190	5,486
New England .....	688	618	626	455	401	478	384	460	509
Connecticut .....	126	121	86	55	45	69	79	119	122
Maine .....	2	0	1	3	4	3	7	11	6
Massachusetts .....	515	466	521	374	323	381	258	273	320
New Hampshire .....	10	5	4	5	11	7	7	25	6
Rhode Island .....	23	18	10	9	14	17	31	28	55
Vermont .....	12	8	4	9	4	1	2	4	0
Middle Atlantic .....	831	871	937	987	974	1,098	1,172	1,133	1,162
New Jersey .....	101	67	66	75	83	94	111	134	103
New York .....	460	544	569	594	580	717	769	699	686
Pennsylvania .....	270	260	302	318	311	287	292	300	373
East North Central .....	692	787	790	765	679	639	709	802	902
Illinois .....	125	173	155	172	120	103	109	99	116
Indiana .....	133	150	124	134	130	82	132	161	131
Michigan .....	115	159	148	135	123	151	133	153	227
Ohio .....	125	111	161	129	129	119	120	165	181
Wisconsin .....	194	194	202	195	177	184	215	224	247
West North Central .....	279	273	279	265	296	319	368	364	401
Iowa .....	39	63	53	57	80	98	115	84	76
Kansas .....	40	31	45	15	21	12	26	41	65
Minnesota .....	76	91	74	70	92	83	105	110	109
Missouri .....	88	63	86	94	82	92	97	113	128
Nebraska .....	26	9	15	16	21	23	21	7	18
North Dakota .....	7	10	2	13	0	8	4	6	5
South Dakota .....	3	6	4	0	0	3	0	3	0
South Atlantic .....	619	518	487	448	367	411	309	384	368
Delaware .....	49	52	64	0	0	5	6	14	14
District of Columbia .....	30	23	38	28	44	27	25	45	38
Florida .....	112	88	71	69	53	56	31	42	42
Georgia .....	65	62	41	36	34	65	31	42	54
Maryland .....	91	88	71	83	85	86	43	60	72
North Carolina .....	159	165	157	183	114	121	111	117	85
South Carolina .....	39	14	11	5	8	16	21	18	14
Virginia .....	65	45	28	42	29	34	40	43	47
West Virginia .....	9	1	8	2	0	1	1	3	2
East South Central .....	103	103	135	142	95	118	130	114	158
Alabama .....	32	22	45	46	20	28	40	66	86
Kentucky .....	22	27	34	40	37	33	27	17	46
Mississippi .....	18	11	8	6	2	10	9	12	2
Tennessee .....	31	43	48	50	36	47	54	19	24
West South Central .....	269	285	278	318	276	302	375	363	382
Arkansas .....	13	1	12	13	7	6	5	10	9
Louisiana .....	14	18	29	23	32	22	35	23	19
Oklahoma .....	27	30	17	19	23	15	10	14	37
Texas .....	215	236	220	263	214	259	325	316	317
Mountain .....	214	231	227	197	215	236	252	313	325
Arizona .....	51	47	65	25	52	78	76	49	55
Colorado .....	72	81	83	88	61	66	72	111	93
Idaho .....	18	18	9	20	17	14	21	30	35
Montana .....	4	7	12	9	7	8	13	6	21
Nevada .....	2	1	2	2	5	1	0	1	21
New Mexico .....	25	31	36	29	44	33	28	61	51
Utah .....	40	34	20	24	27	32	36	43	37
Wyoming .....	2	12	0	0	2	4	6	12	12
Pacific .....	1,171	1,330	1,335	1,269	1,279	1,263	1,198	1,256	1,277
Alaska .....	1	0	0	0	0	0	1	4	9
California .....	1,007	1,177	1,194	1,151	1,155	1,138	1,083	1,121	1,127
Hawaii .....	38	56	32	28	25	29	29	30	20
Oregon .....	30	38	25	33	33	19	23	43	46
Washington .....	95	59	84	57	66	77	62	58	75
Outlying areas .....	1	1	4	0	1	0	2	1	2

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



**Table D-1. Science and engineering graduate students in master's-granting institutions, by enrollment status and field: 1975-91**

Page 1 of 2

Year	Total, all surveyed fields	Sciences								
		Sciences, total	Physical sciences	Earth, atmos- pheric, and ocean sciences	Mathe- matical sciences	Computer sciences	Agri- cultural sciences	Biological sciences	Psychology	Social sciences
Total enrollment										
1975 .....	37,570	31,421	1,404	1,229	2,250	1,050	506	4,833	8,369	11,750
1976 .....	39,245	32,281	1,441	1,189	2,132	1,064	553	5,247	8,456	12,199
1977 .....	43,685	35,385	1,675	1,255	2,016	1,279	573	5,439	9,757	13,391
1978 1/ .....	45,216	35,956	1,665	1,241	1,883	1,598	665	5,484	10,285	13,137
1979 .....	47,317	37,337	1,653	1,230	1,821	2,010	775	5,444	11,082	13,322
1980 .....	47,202	36,280	1,558	1,420	1,743	2,228	675	5,157	10,773	12,726
1981 .....	48,629	36,386	1,576	1,307	1,890	3,288	727	4,941	10,911	11,746
1982 .....	48,979	35,852	1,676	1,370	2,418	4,229	718	4,401	10,198	10,842
1983 .....	51,016	37,470	1,709	1,283	2,534	5,310	752	4,441	10,987	10,474
1984 2/ .....	51,794	38,138	1,646	1,326	2,430	5,444	735	4,221	10,991	11,345
1985 2/ .....	51,736	37,897	1,669	1,328	2,362	6,021	700	4,075	10,788	10,954
1986 2/ .....	52,208	37,608	1,705	1,174	2,351	6,221	654	3,836	10,898	10,769
1987 2/ .....	53,083	37,853	1,783	1,154	2,402	6,054	665	3,797	11,318	10,500
1988 .....	51,843	37,047	1,750	1,131	2,346	5,843	698	3,636	11,767	9,876
1989 .....	55,340	39,489	1,813	1,147	2,534	6,117	683	3,816	12,654	10,725
1990 .....	59,435	42,718	1,770	1,265	2,669	6,826	738	3,343	13,999	11,608
1991 .....	64,395	45,202	1,962	1,523	2,466	7,035	728	4,027	15,234	12,227
Full-time										
1975 .....	13,611	11,838	466	627	548	309	246	1,885	3,842	3,915
1976 .....	13,999	11,982	509	484	578	299	277	2,115	3,624	4,096
1977 .....	15,365	13,140	637	491	503	346	271	2,120	3,988	4,784
1978 1/ .....	15,692	13,196	663	514	508	500	339	2,166	4,258	4,248
1979 .....	16,421	13,712	691	538	520	723	423	2,250	4,663	3,904
1980 .....	16,956	13,679	666	654	544	687	389	2,099	4,595	4,045
1981 .....	16,867	13,051	696	495	468	973	420	2,078	4,543	3,378
1982 .....	16,264	12,369	699	518	638	1,260	372	1,738	3,946	3,198
1983 .....	17,680	13,533	703	552	643	1,411	418	1,875	4,571	3,362
1984 2/ .....	18,181	14,102	705	553	702	1,479	427	1,792	4,530	3,914
1985 2/ .....	17,855	13,862	731	568	673	1,727	376	1,662	4,460	3,665
1986 2/ .....	17,977	13,725	695	461	667	1,921	377	1,554	4,572	3,478
1987 2/ .....	18,585	14,047	762	446	703	1,933	372	1,570	4,933	3,328
1988 .....	17,907	13,464	796	455	714	1,698	398	1,529	5,052	2,822
1989 .....	18,681	13,899	779	422	691	1,734	388	1,547	5,368	2,970
1990 .....	20,117	15,191	698	443	680	2,170	409	1,519	6,039	3,233
1991 .....	21,913	16,109	767	534	734	1,969	445	1,647	6,330	3,683
Part-time										
1975 .....	23,959	19,583	938	602	1,702	741	260	2,978	4,527	7,835
1976 .....	25,246	20,299	932	705	1,554	765	276	3,132	4,832	8,103
1977 .....	28,320	22,245	1,038	764	1,513	933	302	3,319	5,769	8,607
1978 1/ .....	29,524	22,760	1,002	727	1,375	1,096	326	3,318	6,027	8,889
1979 .....	30,896	23,625	962	692	1,301	1,287	352	3,194	6,419	9,418
1980 .....	30,246	22,601	892	786	1,189	1,541	286	3,058	6,178	8,681
1981 .....	31,762	23,335	880	812	1,422	2,315	307	2,863	6,368	8,368
1982 .....	32,715	23,483	977	652	1,780	2,969	346	2,663	6,252	7,644
1983 .....	33,336	23,937	1,006	711	1,891	3,899	338	2,568	6,416	7,112
1984 2/ .....	33,613	24,036	941	773	1,728	3,965	308	2,429	6,461	7,431
1985 2/ .....	33,881	24,035	938	760	1,689	4,294	324	2,413	6,328	7,289
1986 2/ .....	34,231	23,883	1,010	713	1,884	4,300	277	2,282	6,326	7,291
1987 2/ .....	34,498	23,606	1,001	708	1,699	4,121	293	2,227	6,385	7,172
1988 .....	33,936	23,583	954	676	1,632	4,145	300	2,107	6,715	7,054
1989 .....	36,679	25,590	1,034	725	1,843	4,383	295	2,269	7,286	7,755
1990 .....	39,318	27,527	1,072	822	1,989	4,656	329	2,324	7,960	8,375
1991 .....	42,482	29,093	1,195	989	1,732	5,066	283	2,380	8,904	8,544

See explanatory information, if any, and SOURCE(S) at end of table.

**Table D-1. Science and engineering graduate students in master's-granting institutions, by enrollment status and field: 1975-91**

Page 2 of 2

Year	Engineering									Total, health fields
	Engineering, total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical & materials engineering	Other engineering	
Total enrollment										
1975 .....	3,176	34	100	636	512	528	434	39	893	2,973
1976 .....	3,287	28	115	663	517	507	378	42	1,037	3,677
1977 .....	4,100	22	124	849	868	604	524	68	1,041	4,200
1978 1/ .....	4,392	10	140	851	887	602	582	82	1,238	4,868
1979 .....	4,751	5	159	857	908	600	649	100	1,473	5,229
1980 .....	5,178	7	235	955	1,101	803	733	71	1,273	5,744
1981 .....	6,091	7	235	1,199	1,293	838	705	78	1,736	6,152
1982 .....	6,401	8	266	977	1,435	862	700	94	2,059	6,726
1983 .....	6,628	32	224	885	1,668	827	822	109	2,061	6,918
1984 2/ .....	6,544	32	189	832	1,707	880	889	85	1,930	7,112
1985 2/ .....	6,729	32	165	827	1,753	994	911	120	1,927	7,110
1986 2/ .....	7,299	33	142	885	2,068	1,052	1,133	131	1,855	7,301
1987 2/ .....	7,675	35	149	1,093	2,311	1,003	1,214	122	1,748	7,755
1988 .....	7,036	37	117	926	2,182	1,030	1,183	108	1,453	7,760
1989 .....	7,937	67	113	992	2,948	1,235	1,279	120	1,183	7,914
1990 .....	8,974	91	130	1,118	3,378	1,492	1,353	138	1,274	7,743
1991 .....	9,315	67	138	1,260	3,492	1,560	1,200	154	1,424	9,878
Full-time										
1975 .....	647	20	25	167	59	88	52	7	229	1,126
1976 .....	639	12	26	138	55	89	45	7	267	1,378
1977 .....	782	9	24	190	175	115	86	10	173	1,443
1978 1/ .....	856	3	32	214	178	116	84	12	217	1,640
1979 .....	953	1	42	241	182	117	82	15	273	1,756
1980 .....	1,159	3	71	224	270	196	111	18	266	2,118
1981 .....	1,429	3	71	389	294	210	85	18	359	2,387
1982 .....	1,541	3	90	330	256	241	139	25	457	2,354
1983 .....	1,637	15	92	274	349	192	152	18	545	2,510
1984 2/ .....	1,565	14	90	236	396	162	187	9	471	2,514
1985 2/ .....	1,476	14	78	242	394	175	192	18	363	2,517
1986 2/ .....	1,695	16	73	278	490	171	202	30	435	2,557
1987 2/ .....	1,842	17	67	271	583	188	209	27	480	2,696
1988 .....	1,921	16	58	328	641	222	240	23	393	2,522
1989 .....	2,183	30	49	331	799	269	279	28	398	2,579
1990 .....	2,314	84	42	281	811	387	325	24	380	2,612
1991 .....	2,305	67	62	378	807	283	283	25	400	3,499
Part-time										
1975 .....	2,529	14	75	469	453	440	382	32	664	1,847
1976 .....	2,648	16	89	525	462	418	333	35	770	2,299
1977 .....	3,318	13	100	659	693	489	438	58	868	2,757
1978 1/ .....	3,536	7	108	637	709	486	498	70	1,021	3,228
1979 .....	3,798	4	117	616	726	483	567	85	1,200	3,473
1980 .....	4,019	4	164	731	831	607	622	53	1,007	3,626
1981 .....	4,662	4	164	810	999	628	620	60	1,377	3,765
1982 .....	4,860	5	176	647	1,179	621	561	69	1,602	4,372
1983 .....	4,991	17	132	611	1,319	635	670	91	1,516	4,408
1984 2/ .....	4,979	18	99	596	1,311	718	702	76	1,459	4,598
1985 2/ .....	5,253	18	87	585	1,359	819	719	102	1,564	4,593
1986 2/ .....	5,604	17	69	607	1,578	881	931	101	1,420	4,744
1987 2/ .....	5,833	18	82	822	1,728	815	1,005	95	1,268	5,059
1988 .....	5,115	21	59	598	1,541	808	943	85	1,060	5,238
1989 .....	5,754	37	64	661	2,149	966	1,000	92	785	5,335
1990 .....	6,660	27	88	837	2,567	1,105	1,028	114	894	5,131
1991 .....	7,010	0	76	902	2,685	1,277	917	129	1,024	6,379

1/ Master's-granting institutions were not surveyed in 1978; totals include estimates based on 1977 and 1979 data.

2/ Master's-granting institutions were surveyed on a sample basis from 1984 through 1987. Data shown here are therefore subject to sampling error. See Technical Notes for further information.

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table D-2. Science and engineering graduate students in master's-granting institutions,  
by sex and field: 1975-91**

Page 1 of 2

Year	Total, all surveyed fields	Sciences								
		Sciences, total	Physical sciences	Earth, atmos- pheric, and ocean sciences	Mathe- matical sciences	Computer sciences	Agri- cultural sciences	Biological sciences	Psychology	Social sciences
Total enrollment										
1975 .....	37,570	31,421	1,404	1,229	2,250	1,050	506	4,863	8,369	11,750
1976 .....	39,245	32,281	1,441	1,189	2,132	1,064	553	5,247	8,456	12,199
1977 .....	43,685	35,385	1,675	1,255	2,016	1,279	573	5,439	9,757	13,391
1978 1/ .....	45,216	35,956	1,665	1,241	1,883	1,596	665	5,484	10,285	13,137
1979 .....	47,317	37,337	1,653	1,230	1,821	2,010	775	5,444	11,082	13,322
1980 .....	47,202	36,280	1,558	1,420	1,743	2,228	675	5,157	10,773	12,726
1981 .....	48,629	36,386	1,576	1,307	1,890	3,288	727	4,941	10,911	11,748
1982 .....	48,979	35,852	1,676	1,370	2,418	4,229	718	4,401	10,198	10,842
1983 .....	51,016	37,470	1,709	1,263	2,534	5,310	752	4,441	10,987	10,474
1984 2/ .....	51,794	38,138	1,646	1,326	2,430	5,444	735	4,221	10,991	11,345
1985 2/ .....	51,736	37,897	1,669	1,328	2,362	6,021	700	4,075	10,788	10,954
1986 2/ .....	52,208	37,608	1,705	1,174	2,351	6,221	654	3,836	10,898	10,769
1987 2/ .....	53,083	37,653	1,763	1,154	2,402	6,054	665	3,797	11,318	10,500
1988 .....	51,843	37,047	1,750	1,131	2,346	5,843	698	3,636	11,767	9,876
1989 .....	55,340	39,489	1,813	1,147	2,534	6,117	683	3,816	12,654	10,725
1990 .....	59,435	42,718	1,770	1,265	2,669	6,826	738	3,843	13,999	11,608
1991 .....	64,395	45,202	1,962	1,523	2,466	7,035	728	4,027	15,234	12,227
Men										
1975 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976 .....	25,159	20,906	1,109	916	1,369	879	457	3,432	4,379	8,365
1977 .....	27,311	22,207	1,292	990	1,293	1,039	489	3,444	4,691	8,969
1978 1/ .....	27,396	21,963	1,243	975	1,176	1,272	578	3,408	4,877	8,434
1979 .....	27,924	22,309	1,192	962	1,107	1,574	683	3,357	5,217	8,217
1980 .....	27,388	21,167	1,175	1,061	1,111	1,611	585	3,038	4,744	7,842
1981 .....	26,649	19,873	1,118	963	1,136	2,318	594	2,725	4,230	6,789
1982 .....	26,969	19,693	1,179	1,015	1,448	2,918	588	2,301	3,790	6,454
1983 .....	27,345	19,996	1,212	922	1,551	3,643	564	2,289	3,685	6,130
1984 2/ .....	27,231	20,072	1,162	954	1,477	3,840	545	2,111	3,571	6,412
1985 2/ .....	27,389	20,164	1,156	970	1,421	4,411	513	2,012	3,483	6,198
1986 2/ .....	27,457	19,658	1,186	839	1,456	4,361	476	1,862	3,488	5,990
1987 2/ .....	27,917	19,790	1,240	830	1,534	4,324	464	1,909	3,694	5,795
1988 .....	26,385	18,883	1,211	761	1,461	4,135	470	1,766	3,598	5,481
1989 .....	28,546	20,025	1,298	772	1,590	4,378	466	1,852	3,747	5,922
1990 .....	30,481	21,291	1,256	863	1,671	4,942	506	1,822	4,027	6,204
1991 .....	32,104	22,351	1,381	1,013	1,599	5,094	482	1,824	4,237	6,721
Women										
1975 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976 .....	14,086	11,375	332	273	763	185	96	1,815	4,077	3,834
1977 .....	16,374	13,178	383	265	723	240	84	1,995	5,066	4,422
1978 1/ .....	17,820	13,993	422	266	707	324	87	2,076	5,408	4,703
1979 .....	19,393	15,028	461	268	714	436	92	2,087	5,865	5,105
1980 .....	19,814	15,113	383	359	632	617	90	2,119	6,029	4,884
1981 .....	21,980	16,513	458	344	754	970	133	2,216	6,681	4,957
1982 .....	22,010	16,159	497	355	970	1,311	130	2,100	6,408	4,388
1983 .....	23,671	17,474	497	341	983	1,667	188	2,152	7,302	4,344
1984 2/ .....	24,563	18,066	484	372	953	1,604	190	2,110	7,420	4,933
1985 2/ .....	24,347	17,733	513	358	941	1,610	187	2,063	7,305	4,756
1986 2/ .....	24,751	17,950	519	335	895	1,860	178	1,974	7,410	4,779
1987 2/ .....	25,166	17,863	523	324	868	1,730	201	1,888	7,624	4,705
1988 .....	25,458	18,164	539	370	885	1,708	228	1,870	8,169	4,395
1989 .....	26,794	19,484	515	375	944	1,739	217	1,964	8,907	4,803
1990 .....	28,954	21,427	514	402	998	1,884	232	2,021	9,972	5,404
1991 .....	32,291	22,851	581	510	867	1,941	248	2,203	10,997	5,506

See explanatory information, if any, and SOURCE(S) at end of table.

**Table D-2. Science and engineering graduate students in master's-granting institutions, by sex and field: 1975-91**

Year	Engineering									Total, health fields
	Engi- neering, total	Aerospace engi- neering	Chemical engi- neering	Civil engi- neering	Electrical engi- neering	Industrial engi- neering	Mechanical engi- neering	Metallur- gical & materials engi- neering	Other engi- neering	
Total enrollment										
1975 .....	3,176	34	100	636	512	528	434	39	893	2,973
1976 .....	3,287	28	115	663	517	507	378	42	1,037	3,677
1977 .....	4,100	22	124	849	868	604	524	68	1,041	4,200
1978 1/ .....	4,392	10	140	851	887	602	582	82	1,238	4,868
1979 .....	4,751	5	159	857	908	600	649	100	1,473	5,229
1980 .....	5,178	7	235	955	1,101	803	733	71	1,273	5,744
1981 .....	6,091	7	235	1,199	1,293	838	705	78	1,736	6,152
1982 .....	6,401	8	266	977	1,435	862	700	94	2,059	6,726
1983 .....	6,628	32	224	885	1,668	827	822	109	2,061	6,918
1984 2/ .....	6,544	32	189	832	1,707	880	889	85	1,930	7,112
1985 2/ .....	6,729	32	165	827	1,753	994	911	120	1,927	7,110
1986 2/ .....	7,299	33	142	885	2,068	1,052	1,133	131	1,855	7,301
1987 2/ .....	7,675	35	149	1,093	2,311	1,003	1,214	122	1,748	7,755
1988 .....	7,036	37	117	926	2,182	1,030	1,183	108	1,453	7,760
1989 .....	7,937	67	113	992	2,948	1,235	1,279	120	1,183	7,914
1990 .....	8,974	91	130	1,118	3,378	1,492	1,353	138	1,274	7,743
1991 .....	9,315	67	138	1,280	3,492	1,560	1,200	154	1,424	9,878
Men										
1975 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976 .....	3,062	28	100	585	507	486	369	39	948	1,191
1977 .....	3,849	22	117	757	844	552	508	58	991	1,255
1978 1/ .....	4,046	10	128	737	860	538	560	70	1,143	1,387
1979 .....	4,244	5	136	714	875	517	615	85	1,297	1,371
1980 .....	4,790	7	213	837	1,065	708	703	65	1,192	1,431
1981 .....	5,492	7	204	1,087	1,216	722	673	64	1,519	1,284
1982 .....	5,748	8	232	883	1,342	736	663	82	1,802	1,528
1983 .....	5,921	31	189	784	1,520	721	781	96	1,799	1,428
1984 2/ .....	5,763	31	161	726	1,529	708	837	75	1,696	1,396
1985 2/ .....	5,830	31	134	701	1,577	761	842	92	1,692	1,395
1986 2/ .....	6,329	32	121	759	1,844	814	1,045	104	1,610	1,470
1987 2/ .....	6,636	32	123	919	2,043	827	1,093	102	1,497	1,491
1988 .....	6,078	34	94	748	1,932	843	1,064	89	1,274	1,424
1989 .....	6,894	63	93	810	2,600	1,036	1,158	94	1,040	1,627
1990 .....	7,676	88	103	858	2,964	1,238	1,225	109	1,093	1,514
1991 .....	7,939	59	113	992	3,083	1,395	1,088	123	1,196	1,814
Women										
1975 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976 .....	225	0	15	78	10	21	9	3	89	2,486
1977 .....	251	0	7	92	24	52	16	10	50	2,945
1978 1/ .....	346	0	12	114	27	64	22	12	95	3,481
1979 .....	507	0	23	143	33	83	34	15	176	3,858
1980 .....	388	0	22	118	36	95	30	6	81	4,313
1981 .....	599	0	31	112	77	116	32	14	217	4,868
1982 .....	653	0	34	94	93	126	37	12	257	5,198
1983 .....	707	1	35	101	148	106	41	13	262	5,490
1984 2/ .....	781	1	28	106	178	172	52	10	234	5,716
1985 2/ .....	899	1	31	126	176	233	69	28	235	5,715
1986 2/ .....	970	1	21	126	224	238	88	27	245	5,831
1987 2/ .....	1,039	3	26	174	268	176	121	20	251	6,264
1988 .....	958	3	23	178	250	187	119	19	179	6,336
1989 .....	1,043	4	20	182	348	199	121	26	143	6,287
1990 .....	1,298	3	27	262	414	254	128	29	181	6,229
1991 .....	1,376	8	25	288	429	255	112	31	228	8,064

1/ Master's-granting institutions were not surveyed and sex data were not requested in 1978; totals represent estimates based on 1977 and 1979 data.

2/ Master's-granting institutions were surveyed on a sample basis from 1984 through 1987. Data shown here are therefore subject to sampling error. See Technical Notes for further information.

KEY: NA = Not available

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table D-3. Science and engineering graduate students in master's-granting institutions, by field: 1983-91

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields .....	51,016	51,794	51,736	52,208	53,083	51,843	55,340	59,435	64,395
Total, science/engineering fields .....	44,098	44,682	44,626	44,907	45,328	44,083	47,426	51,692	54,517
Engineering, total .....	6,628	6,544	6,729	7,259	7,675	7,036	7,937	8,974	9,315
Aerospace .....	32	32	32	33	35	37	67	91	67
Agricultural .....	0	0	0	0	0	0	0	0	0
Biomedical .....	59	57	56	68	76	79	66	63	48
Chemical .....	211	177	135	121	121	86	99	116	127
Civil .....	885	832	827	885	1,093	926	992	1,118	1,280
Electrical .....	1,668	1,707	1,753	2,068	2,311	2,182	2,948	3,378	3,492
Engineering science .....	280	253	260	234	232	219	19	18	30
Industrial .....	827	880	994	1,052	1,003	1,030	1,235	1,492	1,560
Mechanical .....	822	889	911	1,133	1,214	1,183	1,279	1,353	1,200
Metallurgical/materials .....	109	85	120	131	122	108	120	138	154
Mining .....	26	25	26	25	29	39	30	28	14
Nuclear .....	0	0	0	0	0	0	0	0	0
Petroleum .....	13	12	30	21	28	31	14	14	11
Engineering, n.e.c. ....	1,696	1,595	1,585	1,528	1,411	1,116	1,068	1,165	1,332
Sciences, total .....	37,470	38,138	37,897	37,608	37,653	37,047	39,489	42,718	45,202
Physical sciences .....	1,709	1,646	1,669	1,705	1,763	1,750	1,813	1,770	1,962
Astronomy .....	0	0	0	0	0	0	0	0	0
Chemistry .....	1,248	1,153	1,148	1,135	1,152	1,090	1,099	1,042	1,105
Physics .....	294	346	375	425	477	521	541	571	645
Physical sciences, n.e.c. ....	167	147	146	145	134	139	173	157	212
Earth, atmospheric, & ocean sciences .....	1,263	1,326	1,328	1,174	1,154	1,131	1,147	1,265	1,523
Atmospheric sciences .....	12	12	13	5	4	11	12	4	12
Geosciences .....	633	654	761	643	613	561	462	515	560
Oceanography .....	156	173	97	101	105	107	137	135	120
Earth, atmos., & ocean sci., n.e.c. ....	462	487	457	425	432	452	516	611	831
Mathematical sciences .....	2,534	2,430	2,362	2,351	2,402	2,246	2,534	2,669	2,466
Computer sciences .....	5,310	5,444	6,021	6,221	6,054	5,843	6,117	6,826	7,035
Agricultural sciences .....	752	735	700	654	665	698	683	738	728
Biological sciences .....	4,441	4,221	4,075	3,836	3,797	3,636	3,816	3,843	4,027
Anatomy .....	0	0	0	0	0	0	0	0	0
Biochemistry .....	40	30	34	33	45	32	39	34	41
Biology .....	3,544	3,407	3,229	2,949	2,932	2,829	2,904	2,952	3,049
Biometry/epidemiology .....	0	0	0	0	0	0	0	0	0
Biophysics .....	0	0	0	0	0	0	0	0	0
Botany .....	45	33	28	48	45	44	38	51	50
Cell biology .....	0	0	0	0	0	0	0	0	0
Ecology .....	45	54	50	56	64	65	72	94	101
Entomology/parasitology .....	0	0	0	0	0	0	0	0	0
Genetics .....	49	47	45	43	41	42	44	44	42
Microbiology .....	125	97	105	94	95	66	64	62	58
Nutrition .....	258	254	309	334	312	301	342	307	332
Pathology .....	43	44	47	65	56	57	68	67	71
Pharmacology .....	6	5	2	2	1	1	2	0	0
Physiology .....	0	0	0	0	0	0	0	0	0
Zoology .....	40	37	32	18	16	12	14	13	19
Biosciences, n.e.c. ....	246	213	194	194	190	187	231	219	264
Psychology .....	10,987	10,991	10,788	10,898	11,318	11,767	12,654	13,999	15,234
Social sciences .....	10,474	11,345	10,954	10,769	10,500	9,876	10,725	11,608	12,227
Agricultural economics .....	58	67	68	64	51	50	49	41	53
Anthropology .....	245	219	223	213	227	235	212	250	285
Economics (except agricultural) .....	1,147	1,087	1,111	946	896	833	860	764	803
Geography .....	445	458	421	484	552	607	692	675	662
History and philosophy of science .....	0	0	0	0	0	0	0	0	0
Linguistics .....	209	240	251	290	362	362	421	484	350
Political science .....	5,834	5,791	5,767	5,644	5,381	5,642	6,138	6,537	6,856
Sociology .....	558	630	573	618	637	619	730	862	1,091
Sociology/anthropology .....	186	115	128	117	100	79	76	87	75
Social sciences, n.e.c. ....	1,792	2,738	2,412	2,393	2,294	1,449	1,547	1,908	2,052
Total, health fields .....	6,918	7,112	7,110	7,301	7,755	7,760	7,914	7,743	9,878
Dentistry .....	0	0	0	0	0	0	0	0	0
Neurology .....	14	14	13	10	22	14	9	20	25
Nursing .....	1,959	2,074	2,014	2,230	2,446	2,650	2,636	2,246	3,649
Pharmaceutical sciences .....	16	19	20	10	5	4	8	2	1
Preventive medicine/community health .....	187	184	188	187	201	142	139	164	274
Speech pathology/audiology .....	1,999	1,973	2,002	1,927	1,960	1,742	1,940	2,160	2,430
Veterinary sciences .....	26	26	27	23	20	17	19	19	19
Clinical medicine, n.e.c. ....	343	263	229	250	238	226	201	166	172
Health related, n.e.c. ....	2,374	2,559	2,619	2,664	2,863	2,965	2,962	2,966	3,308

NOTE: Master's-granting institutions were surveyed on a sample basis from 1984 through 1987. Data shown here are therefore subject to sampling error. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



**Table D-4. Male science and engineering graduate students in master's-granting institutions, by field: 1983-91**

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields .....	27,345	27,231	27,389	27,457	27,917	26,385	28,546	30,481	32,104
Total, science/engineering fields .....	25,917	25,835	25,994	25,987	26,426	24,961	26,919	28,967	30,290
Engineering, total .....	5,921	5,763	5,830	6,329	6,636	6,078	6,894	7,676	7,939
Aerospace .....	31	31	31	32	32	34	63	88	59
Agricultural .....	0	0	0	0	0	0	0	0	0
Biomedical .....	42	41	48	59	59	62	60	58	45
Chemical .....	176	149	109	102	100	67	79	90	103
Civil .....	784	726	701	759	919	748	810	856	992
Electrical .....	1,520	1,529	1,577	1,844	2,043	1,932	2,600	2,964	3,063
Engineering science .....	231	212	216	190	192	189	13	14	26
Industrial .....	721	708	761	814	827	843	1,036	1,238	1,305
Mechanical .....	781	837	842	1,045	1,093	1,064	1,158	1,225	1,088
Metallurgical/materials .....	96	75	92	104	102	89	94	109	123
Mining .....	21	21	23	23	28	31	20	18	11
Nuclear .....	0	0	0	0	0	0	0	0	0
Petroleum .....	13	12	25	19	23	27	14	13	10
Engineering, n.e.c. ....	1,505	1,422	1,405	1,338	1,218	992	947	1,003	1,114
Sciences, total .....	19,996	20,072	20,164	19,658	19,790	18,883	20,025	21,291	22,351
Physical sciences .....	1,212	1,162	1,156	1,186	1,240	1,211	1,298	1,256	1,381
Astronomy .....	0	0	0	0	0	0	0	0	0
Chemistry .....	844	773	748	738	725	676	717	673	694
Physics .....	249	285	308	348	417	446	458	471	542
Physical sciences, n.e.c. ....	119	104	100	100	98	89	123	112	145
Earth, atmospheric, & ocean sciences .....	922	954	970	839	830	761	772	863	1,013
Atmospheric sciences .....	10	10	11	5	4	11	9	4	11
Geosciences .....	499	505	597	503	470	399	356	376	389
Oceanography .....	107	114	62	65	67	65	81	73	64
Earth, atmos., & ocean sci., n.e.c. ....	306	325	300	266	289	286	326	410	549
Mathematical sciences .....	1,551	1,477	1,421	1,456	1,534	1,461	1,590	1,671	1,599
Computer sciences .....	3,643	3,840	4,411	4,361	4,324	4,135	4,378	4,942	5,094
Agricultural sciences .....	564	545	513	476	464	470	466	506	482
Biological sciences .....	2,289	2,111	2,012	1,862	1,909	1,766	1,852	1,822	1,824
Anatomy .....	0	0	0	0	0	0	0	0	0
Biochemistry .....	21	10	14	14	23	9	24	24	28
Biology .....	1,956	1,831	1,741	1,576	1,610	1,528	1,539	1,511	1,469
Biometry/epidemiology .....	0	0	0	0	0	0	0	0	0
Biophysics .....	0	0	0	0	0	0	0	0	0
Botany .....	29	26	19	36	33	31	20	30	29
Cell biology .....	0	0	0	0	0	0	0	0	0
Ecology .....	23	27	23	28	33	25	29	32	30
Entomology/parasitology .....	0	0	0	0	0	0	0	0	0
Genetics .....	3	2	2	2	2	1	2	1	1
Microbiology .....	50	35	40	37	41	24	29	27	22
Nutrition .....	28	41	45	42	42	31	62	64	75
Pathology .....	28	26	24	33	32	30	35	33	38
Pharmacology .....	3	3	0	0	1	1	2	0	0
Physiology .....	0	0	0	0	0	0	0	0	0
Zoology .....	21	19	17	11	8	6	6	7	9
Biosciences, n.e.c. ....	127	91	87	83	84	80	104	93	125
Psychology .....	3,685	3,571	3,483	3,488	3,694	3,598	3,747	4,027	4,237
Social sciences .....	6,130	6,412	6,198	5,990	5,795	5,481	5,922	6,204	6,721
Agricultural economics .....	47	56	58	58	44	44	42	33	32
Anthropology .....	101	81	118	102	87	82	100	113	134
Economics (except agricultural) .....	789	775	802	668	618	582	572	526	573
Geography .....	307	296	292	316	351	390	438	421	421
History and philosophy of science .....	0	0	0	0	0	0	0	0	0
Linguistics .....	52	63	46	58	72	64	87	95	158
Political science .....	3,509	3,475	3,383	3,256	3,102	3,140	3,416	3,490	3,676
Sociology .....	214	269	252	261	258	282	341	362	461
Sociology/anthropology .....	81	51	53	46	43	39	39	37	36
Social sciences, n.e.c. ....	1,030	1,346	1,194	1,225	1,220	838	887	1,127	1,230
Total, health fields .....	1,428	1,396	1,395	1,470	1,491	1,424	1,627	1,514	1,914
Dentistry .....	0	0	0	0	0	0	0	0	0
Neurology .....	14	14	7	5	13	7	5	7	8
Nursing .....	133	143	152	209	170	221	310	212	318
Pharmaceutical sciences .....	9	11	12	4	2	2	4	1	0
Preventive medicine/community health .....	56	56	40	40	45	40	34	42	79
Speech pathology/audiology .....	131	167	140	145	115	109	171	171	199
Veterinary sciences .....	12	20	22	20	17	13	15	14	14
Clinical medicine, n.e.c. ....	100	56	49	61	53	47	35	48	45
Health related, n.e.c. ....	973	929	973	986	1,076	985	1,053	1,019	1,151

NOTE: Master's-granting institutions were surveyed on a sample basis from 1984 through 1987. Data shown here are therefore subject to sampling error. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table D-5. Female science and engineering graduate students in master's-granting institutions, by field: 1983-91**

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields .....	23,671	24,563	24,347	24,751	25,166	25,458	26,794	28,954	32,291
Total, science/engineering fields .....	18,181	18,847	18,632	18,920	18,902	19,122	20,507	22,725	24,227
Engineering, total .....	707	781	899	970	1,039	958	1,043	1,288	1,378
Aerospace .....	1	1	1	1	3	3	4	3	8
Agricultural .....	0	0	0	0	0	0	0	0	0
Biomedical .....	17	16	8	9	17	17	6	5	3
Chemical .....	35	28	26	19	21	19	20	26	24
Civil .....	101	106	126	126	174	178	182	262	288
Electrical .....	148	178	176	224	268	250	348	414	429
Engineering science .....	49	41	44	44	40	30	6	4	4
Industrial .....	106	172	233	238	176	187	199	254	255
Mechanical .....	41	52	69	88	121	119	121	128	112
Metallurgical/materials .....	13	10	28	27	20	19	26	29	31
Mining .....	5	4	3	2	1	8	10	10	3
Nuclear .....	0	0	0	0	0	0	0	0	0
Petroleum .....	0	0	5	2	5	4	0	1	1
Engineering, n.e.c. ....	191	173	180	190	193	124	121	162	218
Sciences, total .....	17,474	18,066	17,733	17,950	17,863	18,164	19,464	21,427	22,851
Physical sciences .....	497	484	513	519	523	539	515	514	581
Astronomy .....	0	0	0	0	0	0	0	0	0
Chemistry .....	404	380	400	397	427	414	382	369	411
Physics .....	45	61	67	77	60	75	83	100	103
Physical sciences, n.e.c. ....	48	43	46	45	36	50	50	45	67
Earth, atmospheric, & ocean sciences .....	341	372	358	335	324	370	375	402	510
Atmospheric sciences .....	2	2	2	0	0	0	3	0	1
Geosciences .....	134	149	164	140	143	162	126	139	171
Oceanography .....	49	59	35	36	38	42	56	62	56
Earth, atmos., & ocean sci., n.e.c. ....	158	162	157	159	143	166	190	201	282
Mathematical sciences .....	983	953	941	895	868	885	944	998	867
Computer sciences .....	1,667	1,804	1,610	1,860	1,730	1,708	1,739	1,884	1,941
Agricultural sciences .....	188	190	187	178	201	228	217	232	246
Biological sciences .....	2,152	2,110	2,063	1,974	1,888	1,870	1,964	2,021	2,203
Anatomy .....	0	0	0	0	0	0	0	0	0
Biochemistry .....	19	20	20	19	22	23	15	10	13
Biology .....	1,588	1,576	1,488	1,373	1,322	1,301	1,365	1,441	1,580
Biometry/epidemiology .....	0	0	0	0	0	0	0	0	0
Biophysics .....	0	0	0	0	0	0	0	0	0
Botany .....	16	7	9	12	12	13	18	21	21
Cell biology .....	0	0	0	0	0	0	0	0	0
Ecology .....	22	27	27	28	31	40	43	62	71
Entomology/parasitology .....	0	0	0	0	0	0	0	0	0
Genetics .....	46	45	43	41	39	41	42	43	41
Microbiology .....	75	62	65	57	54	42	35	35	36
Nutrition .....	230	213	264	292	270	270	280	243	257
Pathology .....	15	18	23	32	24	27	31	34	35
Pharmacology .....	3	2	2	2	0	0	0	0	0
Physiology .....	0	0	0	0	0	0	0	0	0
Zoology .....	19	18	15	7	8	6	8	6	10
Biosciences, n.e.c. ....	119	122	107	111	106	107	127	126	139
Psychology .....	7,302	7,420	7,305	7,410	7,624	8,169	8,907	9,972	10,997
Social sciences .....	4,344	4,933	4,756	4,779	4,705	4,395	4,803	5,404	5,506
Agricultural economics .....	11	11	10	6	7	6	7	8	21
Anthropology .....	144	138	105	111	140	153	112	137	151
Economics (except agricultural) .....	358	312	309	278	278	251	288	238	230
Geography .....	138	162	129	168	201	217	254	254	241
History and philosophy of science .....	0	0	0	0	0	0	0	0	0
Linguistics .....	157	177	205	232	290	278	334	389	192
Political science .....	2,325	2,316	2,384	2,388	2,279	2,502	2,722	3,047	3,180
Sociology .....	344	361	321	357	379	337	389	500	630
Sociology/anthropology .....	105	64	75	71	57	40	37	50	39
Social sciences, n.e.c. ....	762	1,392	1,218	1,168	1,074	611	660	781	822
Total, health fields .....	5,490	5,716	5,715	5,831	6,264	6,336	6,287	6,229	8,084
Dentistry .....	0	0	0	0	0	0	0	0	0
Neurology .....	0	0	6	5	9	7	4	13	17
Nursing .....	1,826	1,931	1,862	2,021	2,276	2,429	2,326	2,034	3,331
Pharmaceutical sciences .....	7	8	8	6	3	2	4	1	1
Preventive medicine/community health .....	131	128	146	147	156	102	105	122	195
Speech pathology/audiology .....	1,868	1,806	1,862	1,782	1,845	1,633	1,769	1,989	2,231
Veterinary sciences .....	14	6	5	3	3	4	4	5	5
Clinical medicine, n.e.c. ....	243	207	180	189	185	179	166	118	127
Health related, n.e.c. ....	1,401	1,630	1,646	1,678	1,787	1,980	1,909	1,947	2,157

NOTE: Master's-granting institutions were surveyed on a sample basis from 1984 through 1987. Data shown here are therefore subject to sampling error. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table D-6. Science and engineering graduate students in public master's-granting institutions, by field: 1983-91**

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields .....	35,127	35,606	35,771	36,676	37,801	36,799	39,734	42,240	45,556
Total, science/engineering fields .....	30,545	30,887	30,950	31,834	32,596	31,618	34,268	37,031	39,084
Engineering, total .....	3,851	3,781	3,843	4,357	4,646	4,024	4,553	4,850	5,257
Aerospace .....	0	1	2	3	4	6	27	25	28
Agricultural .....	0	0	0	0	0	0	0	0	0
Biomedical .....	40	35	31	41	52	69	49	47	35
Chemical .....	114	90	58	54	64	40	54	82	82
Civil .....	648	612	593	645	855	679	716	749	927
Electrical .....	733	739	769	1,049	1,271	1,105	1,474	1,587	1,728
Engineering science .....	4	8	10	9	6	7	12	12	10
Industrial .....	508	565	650	703	629	656	723	678	792
Mechanical .....	329	353	356	523	554	501	574	649	621
Metallurgical/materials .....	46	35	54	71	54	45	62	81	83
Mining .....	26	25	26	25	29	39	30	28	14
Nuclear .....	0	0	0	0	0	0	0	0	0
Petroleum .....	13	12	30	21	28	31	14	14	11
Engineering, n.e.c. ....	1,390	1,306	1,264	1,213	1,100	846	818	898	926
Sciences, total .....	26,694	27,106	27,107	27,477	27,950	27,594	29,715	32,181	33,827
Physical sciences .....	1,351	1,340	1,348	1,393	1,439	1,430	1,515	1,508	1,672
Astronomy .....	0	0	0	0	0	0	0	0	0
Chemistry .....	945	904	884	888	899	842	862	823	893
Physics .....	239	289	318	360	406	449	480	528	574
Physical sciences, n.e.c. ....	167	147	146	145	134	139	173	157	205
Earth, atmospheric, & ocean sciences .....	1,222	1,286	1,291	1,128	1,100	1,060	1,053	1,156	1,403
Atmospheric sciences .....	12	12	13	5	4	11	12	4	12
Geosciences .....	633	654	761	643	613	561	482	515	560
Oceanography .....	156	173	97	101	105	107	117	117	112
Earth, atmos., & ocean sci., n.e.c. ....	421	447	420	379	378	381	442	520	719
Mathematical sciences .....	2,330	2,113	2,022	2,051	2,036	1,993	2,168	2,319	2,155
Computer sciences .....	2,891	2,966	3,512	3,803	3,743	3,529	3,726	3,992	4,337
Agricultural sciences .....	714	702	670	635	649	668	652	695	685
Biological sciences .....	3,632	3,495	3,380	3,175	3,169	3,019	3,138	3,159	3,324
Anatomy .....	0	0	0	0	0	0	0	0	0
Biochemistry .....	0	0	0	0	14	9	13	10	8
Biology .....	3,086	3,005	2,874	2,658	2,655	2,590	2,671	2,704	2,832
Biometry/epidemiology .....	0	0	0	0	0	0	0	0	0
Biophysics .....	0	0	0	0	0	0	0	0	0
Botany .....	35	27	27	48	45	43	36	49	46
Cell biology .....	0	0	0	0	0	0	0	0	0
Ecology .....	21	30	26	32	36	32	35	44	41
Entomology/parasitology .....	0	0	0	0	0	0	0	0	0
Genetics .....	0	0	0	0	0	0	0	0	0
Microbiology .....	75	47	54	43	45	28	39	39	35
Nutrition .....	187	193	233	248	240	202	211	178	215
Pathology .....	22	19	19	25	25	25	31	28	29
Pharmacology .....	0	0	0	0	0	0	0	0	0
Physiology .....	0	0	0	0	0	0	0	0	0
Zoology .....	26	24	22	16	14	10	13	13	19
Biosciences, n.e.c. ....	180	150	125	105	95	80	89	94	99
Psychology .....	7,099	7,108	7,014	7,127	7,444	7,688	8,449	9,241	9,719
Social sciences .....	7,455	8,096	7,870	8,165	8,370	8,207	9,014	10,111	10,532
Agricultural economics .....	58	67	68	64	51	50	49	41	53
Anthropology .....	244	219	223	213	227	235	212	250	285
Economics (except agricultural) .....	573	602	651	646	610	602	602	672	705
Geography .....	443	456	419	462	550	607	692	675	662
History and philosophy of science .....	0	0	0	0	0	0	0	0	0
Linguistics .....	209	240	251	290	362	362	421	484	350
Political science .....	3,987	3,918	3,915	3,986	4,048	4,462	4,953	5,417	5,581
Sociology .....	529	604	550	592	608	589	673	806	1,018
Sociology/anthropology .....	57	47	47	42	42	40	40	56	72
Social sciences, n.e.c. ....	1,355	1,943	1,746	1,850	1,872	1,260	1,372	1,710	1,806
Total, health fields .....	4,582	4,719	4,821	4,842	5,205	5,181	5,466	5,209	6,472
Dentistry .....	0	0	0	0	0	0	0	0	0
Neurology .....	0	0	0	0	0	0	0	0	0
Nursing .....	1,100	1,268	1,397	1,457	1,629	1,711	1,703	1,366	2,116
Pharmaceutical sciences .....	0	0	0	0	0	0	0	0	0
Preventive medicine/community health .....	125	131	142	152	175	142	139	164	274
Speech pathology/audiology .....	1,821	1,762	1,733	1,666	1,688	1,592	1,705	1,916	2,122
Veterinary sciences .....	0	0	0	0	0	0	0	0	0
Clinical medicine, n.e.c. ....	161	139	123	160	155	148	150	130	129
Health related, n.e.c. ....	1,375	1,419	1,426	1,407	1,558	1,588	1,769	1,633	1,831

NOTE: Master's-granting institutions were surveyed on a sample basis from 1984 through 1987. Data shown here are therefore subject to sampling error. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table D-7. Science and engineering graduate students in private master's-granting institutions, by field: 1983-91**

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields .....	15,889	16,188	15,965	15,532	15,282	15,044	15,606	17,195	18,839
Total, science/engineering fields .....	13,553	13,795	13,676	13,073	12,732	12,465	13,158	14,661	15,433
Engineering, total .....	2,777	2,763	2,886	2,942	3,029	3,012	3,384	4,124	4,058
Aerospace .....	32	31	30	30	31	31	40	66	39
Agricultural .....	0	0	0	0	0	0	0	0	0
Biomedical .....	19	22	25	27	24	10	17	16	13
Chemical .....	97	87	77	67	57	46	45	34	45
Civil .....	237	220	234	240	238	247	276	369	353
Electrical .....	935	968	984	1,019	1,040	1,077	1,474	1,791	1,764
Engineering science .....	276	245	250	225	226	212	7	6	20
Industrial .....	319	315	344	349	374	374	512	814	768
Mechanical .....	493	536	555	610	660	682	705	704	579
Metallurgical/materials .....	63	50	68	60	68	63	58	57	71
Mining .....	0	0	0	0	0	0	0	0	0
Nuclear .....	0	0	0	0	0	0	0	0	0
Petroleum .....	0	0	0	0	0	0	0	0	0
Engineering, n.e.c. ....	306	289	321	315	311	270	250	267	406
Sciences, total .....	10,776	11,032	10,790	10,131	9,703	9,453	9,774	10,537	11,375
Physical sciences .....	358	306	321	312	324	320	298	262	290
Astronomy .....	0	0	0	0	0	0	0	0	0
Chemistry .....	303	249	264	247	253	248	237	219	212
Physics .....	55	57	57	65	71	72	61	43	71
Physical sciences, n.e.c. ....	0	0	0	0	0	0	0	0	7
Earth, atmospheric, & ocean sciences .....	41	40	37	46	54	71	94	109	120
Atmospheric sciences .....	0	0	0	0	0	0	0	0	0
Geosciences .....	0	0	0	0	0	0	0	0	0
Oceanography .....	0	0	0	0	0	0	20	18	8
Earth, atmos., & ocean sci., n.e.c. ....	41	40	37	46	54	71	74	91	112
Mathematical sciences .....	204	317	340	300	366	353	366	350	311
Computer sciences .....	2,419	2,478	2,509	2,418	2,311	2,314	2,391	2,834	2,698
Agricultural sciences .....	38	33	30	19	16	30	31	43	43
Biological sciences .....	809	726	695	661	628	617	678	684	703
Anatomy .....	0	0	0	0	0	0	0	0	0
Biochemistry .....	40	30	34	33	31	23	26	24	33
Biology .....	458	402	355	291	277	239	233	248	217
Biometry/epidemiology .....	0	0	0	0	0	0	0	0	0
Biophysics .....	0	0	0	0	0	0	0	0	0
Botany .....	10	6	1	0	0	1	2	2	4
Cell biology .....	0	0	0	0	0	0	0	0	0
Ecology .....	24	24	24	24	28	33	37	50	60
Entomology/parasitology .....	0	0	0	0	0	0	0	0	0
Genetics .....	49	47	45	43	41	42	44	44	42
Microbiology .....	50	50	51	51	50	38	25	23	23
Nutrition .....	71	61	76	86	72	99	131	129	117
Pathology .....	21	25	28	40	31	32	35	39	42
Pharmacology .....	6	5	2	2	1	1	2	0	0
Physiology .....	0	0	0	0	0	0	0	0	0
Zoology .....	14	13	10	2	2	2	1	0	0
Biosciences, n.e.c. ....	66	63	69	89	95	107	142	125	165
Psychology .....	3,888	3,883	3,774	3,771	3,874	4,079	4,205	4,758	5,515
Social sciences .....	3,019	3,249	3,084	2,604	2,130	1,669	1,711	1,497	1,695
Agricultural economics .....	0	0	0	0	0	0	0	0	0
Anthropology .....	1	0	0	0	0	0	0	0	0
Economics (except agricultural) .....	574	485	460	300	286	231	258	92	98
Geography .....	2	2	2	2	2	0	0	0	0
History and philosophy of science .....	0	0	0	0	0	0	0	0	0
Linguistics .....	0	0	0	0	0	0	0	0	0
Political science .....	1,847	1,873	1,852	1,658	1,333	1,180	1,185	1,120	1,275
Sociology .....	29	26	23	26	29	30	57	56	73
Sociology/anthropology .....	129	68	81	75	58	39	36	31	3
Social sciences, n.e.c. ....	437	795	666	543	422	189	175	198	246
Total, health fields .....	2,336	2,393	2,289	2,459	2,550	2,579	2,448	2,534	3,406
Dentistry .....	0	0	0	0	0	0	0	0	0
Neurology .....	14	14	13	10	22	14	9	20	25
Nursing .....	859	806	617	773	817	939	933	880	1,533
Pharmaceutical sciences .....	16	19	20	10	5	4	8	2	1
Preventive medicine/community health .....	62	53	44	35	26	0	0	0	0
Speech pathology/audiology .....	178	211	269	261	272	150	235	244	308
Veterinary sciences .....	26	26	27	23	20	17	19	19	19
Clinical medicine, n.e.c. ....	182	124	106	90	83	78	51	36	43
Health related, n.e.c. ....	999	1,140	1,193	1,257	1,305	1,377	1,193	1,333	1,477

NOTE: Master's-granting institutions were surveyed on a sample basis from 1984 through 1987. Data shown here are therefore subject to sampling error. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table D-8. Science and engineering graduate students in master's-granting institutions, by enrollment status and citizenship, and racial/ethnic background of U.S. citizens: 1983-91**

Page 1 of 1

Enrollment status, citizenship, and racial/ethnic background	1983	1984	1985	1986	1987	1988	1989	1990	1991
<b>Total enrollment</b>	<b>51,016</b>	<b>51,794</b>	<b>51,736</b>	<b>52,208</b>	<b>53,083</b>	<b>51,843</b>	<b>55,340</b>	<b>59,435</b>	<b>64,395</b>
Total U.S. citizens	46,437	47,201	47,156	47,456	48,274	46,949	49,884	53,298	58,177
Black, non-Hispanic	3,292	3,360	3,160	3,144	3,064	3,206	3,474	3,806	4,199
American Indian/Alaskan Native	224	144	140	155	180	202	161	184	241
Asian/Pacific Islander	1,750	1,782	1,851	1,844	2,146	2,288	2,674	2,782	3,284
Hispanic	1,768	1,660	1,369	1,200	1,373	1,548	1,562	1,759	2,079
White, non-Hispanic	34,317	34,742	33,781	33,708	34,794	35,609	37,173	40,284	43,381
Other or unknown	5,086	5,513	6,855	7,405	6,717	4,096	4,840	4,483	4,993
Non-U.S. citizens	4,579	4,593	4,580	4,752	4,809	4,894	5,456	6,137	6,218
<b>Full-time enrollment</b>	<b>17,680</b>	<b>18,181</b>	<b>17,855</b>	<b>17,977</b>	<b>18,585</b>	<b>17,907</b>	<b>18,661</b>	<b>20,117</b>	<b>21,913</b>
Total U.S. citizens	14,943	15,317	15,067	15,062	15,562	14,907	15,514	16,529	18,515
Black, non-Hispanic	1,328	1,368	1,141	1,165	1,139	1,208	1,305	1,366	1,541
American Indian/Alaskan Native	115	74	62	60	82	83	59	56	99
Asian/Pacific Islander	567	553	569	563	660	657	826	809	1,018
Hispanic	631	560	440	402	437	466	493	566	632
White, non-Hispanic	10,810	11,164	10,580	10,754	11,408	11,005	11,416	12,334	13,710
Other or unknown	1,492	1,598	2,275	2,118	1,836	1,488	1,415	1,398	1,515
Non-U.S. citizens	2,737	2,864	2,788	2,915	3,023	3,000	3,147	3,588	3,398
<b>Part-time enrollment</b>	<b>33,336</b>	<b>33,613</b>	<b>33,881</b>	<b>34,231</b>	<b>34,498</b>	<b>33,936</b>	<b>36,679</b>	<b>39,318</b>	<b>42,482</b>
Total U.S. citizens	31,494	31,884	32,089	32,394	32,712	32,042	34,370	36,769	39,662
Black, non-Hispanic	1,984	1,992	2,019	1,979	1,925	1,998	2,169	2,440	2,658
American Indian/Alaskan Native	109	70	78	95	98	119	102	128	142
Asian/Pacific Islander	1,183	1,229	1,282	1,281	1,486	1,631	1,848	1,973	2,266
Hispanic	1,137	1,100	929	798	936	1,082	1,069	1,193	1,447
White, non-Hispanic	23,507	23,578	23,201	22,954	23,386	24,604	25,757	27,950	29,671
Other or unknown	3,594	3,915	4,580	5,287	4,881	2,608	3,425	3,085	3,478
Non-U.S. citizens	1,842	1,729	1,792	1,837	1,786	1,894	2,309	2,549	2,820

NOTE: Master's-granting institutions were surveyed on a sample basis from 1984 through 1987. Data shown here are therefore subject to sampling error. See Technical Notes for further information.

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



**Table D-9. Full-time science and engineering graduate students in master's-granting institutions, by field: 1983-91**

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields .....	17,680	18,181	17,855	17,977	18,585	17,907	18,661	20,117	21,913
Total, science/engineering fields .....	15,170	15,667	15,338	15,420	15,889	15,385	16,082	17,505	18,414
Engineering, total .....	1,637	1,565	1,476	1,695	1,842	1,921	2,183	2,314	2,305
Aerospace .....	15	14	14	16	17	16	30	64	67
Agricultural .....	0	0	0	0	0	0	0	0	0
Biomedical .....	19	15	12	14	40	53	39	37	25
Chemical .....	79	78	52	52	42	29	37	33	55
Civil .....	274	236	242	278	271	328	331	281	378
Electrical .....	349	396	394	490	583	641	799	811	807
Engineering science .....	17	16	18	18	17	13	10	11	7
Industrial .....	192	162	175	171	188	222	269	387	283
Mechanical .....	152	187	192	202	209	240	279	325	283
Metallurgical/materials .....	18	9	18	30	27	23	28	24	25
Mining .....	24	21	20	23	29	36	26	28	11
Nuclear .....	0	0	0	0	0	0	0	0	0
Petroleum .....	13	12	26	21	25	29	12	9	7
Engineering, n.e.c. ....	485	419	313	380	394	291	323	304	357
Sciences, total .....	13,533	14,102	13,862	13,725	14,047	13,464	13,899	15,191	16,109
Physical sciences .....	703	705	731	695	762	796	779	698	767
Astronomy .....	0	0	0	0	0	0	0	0	0
Chemistry .....	528	508	513	460	500	506	462	387	407
Physics .....	134	164	184	204	226	265	279	276	324
Physical sciences, n.e.c. ....	41	33	34	31	36	25	38	35	36
Earth, atmospheric, & ocean sciences .....	552	553	568	461	446	455	422	443	534
Atmospheric sciences .....	7	6	5	1	2	4	7	0	2
Geosciences .....	295	296	353	274	255	250	197	230	219
Oceanography .....	65	81	42	42	48	53	54	55	64
Earth, atmos., & ocean sci., n.e.c. ....	185	170	166	144	141	146	164	158	249
Mathematical sciences .....	643	702	673	667	703	714	691	680	734
Computer sciences .....	1,411	1,479	1,727	1,921	1,933	1,698	1,734	2,170	1,969
Agricultural sciences .....	416	427	376	377	372	398	388	400	445
Biological sciences .....	1,875	1,792	1,662	1,554	1,570	1,529	1,547	1,519	1,647
Anatomy .....	0	0	0	0	0	0	0	0	0
Biochemistry .....	26	18	17	15	14	9	16	15	14
Biology .....	1,517	1,461	1,354	1,235	1,245	1,228	1,225	1,206	1,301
Biometry/epidemiology .....	0	0	0	0	0	0	0	0	0
Biophysics .....	0	0	0	0	0	0	0	0	0
Botany .....	30	24	22	39	40	36	33	43	47
Cell biology .....	0	0	0	0	0	0	0	0	0
Ecology .....	9	12	12	13	12	14	7	6	11
Entomology/parasitology .....	0	0	0	0	0	0	0	0	0
Genetics .....	45	44	43	42	41	41	43	42	41
Microbiology .....	24	23	12	18	19	13	9	14	9
Nutrition .....	106	123	124	127	122	118	137	98	102
Pathology .....	5	6	7	5	15	9	15	28	28
Pharmacology .....	2	1	0	0	0	0	0	0	0
Physiology .....	0	0	0	0	0	0	0	0	0
Zoology .....	27	19	19	12	12	11	8	6	19
Biosciences, n.e.c. ....	84	61	52	48	50	50	54	61	75
Psychology .....	4,571	4,530	4,460	4,572	4,933	5,052	5,368	6,039	6,330
Social sciences .....	3,362	3,914	3,665	3,478	3,328	2,822	2,970	3,233	3,683
Agricultural economics .....	53	52	44	49	34	31	27	27	35
Anthropology .....	74	68	111	55	71	77	75	83	108
Economics (except agricultural) .....	356	346	361	335	320	285	290	273	316
Geography .....	190	192	185	177	240	260	258	229	242
History and philosophy of science .....	0	0	0	0	0	0	0	0	0
Linguistics .....	59	55	34	51	61	81	76	50	51
Political science .....	1,645	1,774	1,643	1,605	1,396	1,411	1,510	1,688	1,876
Sociology .....	237	328	289	259	290	262	294	353	399
Sociology/anthropology .....	75	34	31	34	33	28	26	38	41
Social sciences, n.e.c. ....	673	1,065	967	913	883	387	414	492	615
Total, health fields .....	2,510	2,514	2,517	2,557	2,696	2,522	2,579	2,612	3,499
Dentistry .....	0	0	0	0	0	0	0	0	0
Neurology .....	14	14	13	3	5	7	3	10	10
Nursing .....	478	431	473	499	574	679	634	406	904
Pharmaceutical sciences .....	2	2	2	0	1	1	0	0	0
Preventive medicine/community health .....	35	40	47	47	50	44	35	58	54
Speech pathology/audiology .....	918	973	1,001	1,051	1,075	931	1,094	1,244	1,522
Veterinary sciences .....	26	23	24	20	17	17	19	11	11
Clinical medicine, n.e.c. ....	95	60	48	63	50	46	52	47	49
Health related, n.e.c. ....	942	971	909	874	924	797	742	836	949

NOTE: Master's-granting institutions were surveyed on a sample basis from 1984 through 1987. Data shown here are therefore subject to sampling error. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table D-10. Part-time science and engineering graduate students in master's-granting institutions, by field: 1983-91**

Page 1 of 1

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields	33,336	33,613	33,881	34,231	34,498	33,936	36,679	39,318	42,482
Total, science/engineering fields	28,928	29,015	29,288	29,487	29,439	28,698	31,344	34,187	36,103
Engineering, total	4,991	4,979	5,253	5,604	5,833	5,115	5,754	6,860	7,010
Aerospace	17	1E	18	17	18	21	37	27	0
Agricultural	0	0	0	0	0	0	0	0	0
Biomedical	40	42	44	54	36	26	27	26	23
Chemical	132	99	83	69	79	57	62	83	72
Civil	611	596	585	607	822	598	661	837	902
Electrical	1,319	1,311	1,359	1,578	1,728	1,541	2,149	2,567	2,685
Engineering science	263	237	242	216	215	206	9	7	23
Industrial	635	718	819	881	815	808	968	1,105	1,277
Mechanical	670	702	719	931	1,005	943	1,000	1,028	917
Metallurgical/materials	91	76	102	101	95	85	92	114	129
Mining	2	4	6	2	0	3	4	0	3
Nuclear	0	0	0	0	0	0	0	0	0
Petroleum	0	0	4	0	3	2	2	5	4
Engineering, n.e.c.	1,211	1,176	1,272	1,148	1,017	825	745	861	975
Sciences, total	23,937	24,036	24,035	23,883	23,606	23,583	25,590	27,527	29,093
Physical sciences	1,006	941	938	1,010	1,001	954	1,034	1,072	1,195
Astronomy	0	0	0	0	0	0	0	0	0
Chemistry	720	645	635	675	652	584	637	655	698
Physics	160	182	191	221	251	256	262	295	321
Physical sciences, n.e.c.	126	114	112	114	98	114	135	122	176
Earth, atmospheric, & ocean sciences	711	773	760	713	708	676	725	822	989
Atmospheric sciences	5	6	8	4	2	7	5	4	10
Geosciences	338	358	408	369	358	311	285	285	341
Oceanography	91	92	55	59	57	54	83	80	56
Earth, atmos., & ocean sci., n.e.c.	277	317	289	281	291	304	352	453	582
Mathematical sciences	1,891	1,728	1,689	1,684	1,699	1,632	1,843	1,989	1,732
Computer sciences	3,899	3,965	4,294	4,300	4,121	4,145	4,383	4,656	5,066
Agricultural sciences	336	308	324	277	293	300	295	329	283
Biological sciences	2,566	2,429	2,413	2,282	2,227	2,107	2,269	2,324	2,380
Anatomy	0	0	0	0	0	0	0	0	0
Biochemistry	14	12	17	18	31	23	23	19	27
Biology	2,027	1,946	1,875	1,714	1,687	1,601	1,679	1,746	1,748
Biometry/epidemiology	0	0	0	0	0	0	0	0	0
Biophysics	0	0	0	0	0	0	0	0	0
Botany	15	9	6	9	5	8	5	8	3
Cell biology	0	0	0	0	0	0	0	0	0
Ecology	36	42	38	43	52	51	65	88	90
Entomology/parasitology	0	0	0	0	0	0	0	0	0
Genetics	4	3	2	1	0	1	1	2	1
Microbiology	101	74	93	76	76	53	55	48	49
Nutrition	152	131	185	207	190	183	205	209	230
Pathology	38	38	40	60	41	48	51	39	43
Pharmacology	4	4	2	2	1	1	2	0	0
Physiology	0	0	0	0	0	0	0	0	0
Zoology	13	18	13	6	4	1	6	7	0
Biosciences, n.e.c.	162	152	142	146	140	137	177	158	189
Psychology	6,416	6,461	6,328	6,326	6,385	6,715	7,288	7,960	8,904
Social sciences	7,112	7,431	7,289	7,291	7,172	7,054	7,755	8,375	8,544
Agricultural economics	5	15	24	15	17	19	22	14	18
Anthropology	171	151	112	158	156	158	137	167	177
Economics (except agricultural)	791	741	750	611	576	548	570	491	487
Geography	255	266	236	307	312	347	434	446	420
History and philosophy of science	0	0	0	0	0	0	0	0	0
Linguistics	150	185	217	239	301	281	345	434	299
Political science	4,189	4,017	4,124	4,039	3,985	4,231	4,628	4,849	4,960
Sociology	321	202	284	359	347	357	436	509	692
Sociology/anthropology	111	81	97	83	67	51	50	49	34
Social sciences, n.e.c.	1,119	1,673	1,445	1,480	1,411	1,062	1,133	1,416	1,437
Total, health fields	4,408	4,598	4,593	4,744	5,059	5,238	5,335	5,131	6,379
Dentistry	0	0	0	0	0	0	0	0	0
Neurology	0	0	0	7	17	7	6	10	15
Nursing	1,481	1,643	1,541	1,731	1,872	1,971	2,002	1,840	2,745
Pharmaceutical sciences	14	17	18	10	4	3	8	2	1
Preventive medicine/community health	152	144	139	140	151	98	104	106	220
Speech pathology/audiology	1,081	1,000	1,001	876	885	811	846	916	908
Veterinary sciences	0	3	3	3	3	0	0	8	8
Clinical medicine, n.e.c.	248	203	181	187	186	180	149	119	123
Health related, n.e.c.	1,432	1,568	1,710	1,790	1,939	2,168	2,220	2,130	2,359

NOTE: Master's-granting institutions were surveyed on a sample basis from 1984 through 1987. Data shown here are therefore subject to sampling error. See Technical Notes for further information.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table E-1. Graduate students in the science, engineering, and health fields  
in all institutions, by geographic division, State, institution,  
and area of study: 1991**

Page 1 of 11

Division, State, and Institution	Total, all surveyed fields	Sciences, total	Engi- neering, total	Health fields
<b>Total, all institutions</b>	<b>475,691</b>	<b>300,833</b>	<b>114,407</b>	<b>60,451</b>
<b>New England</b>	<b>34,932</b>	<b>21,159</b>	<b>9,251</b>	<b>4,522</b>
<b>Connecticut</b>	<b>7,217</b>	<b>4,770</b>	<b>1,271</b>	<b>1,176</b>
Central Connecticut State University	32	32	0	0
Connecticut College	31	31	0	0
Quinnipiac College	197	0	0	197
Southern Connecticut State University	203	110	0	93
St. Joseph College	176	118	0	58
The Hartford Graduate Center	780	337	443	0
Trinity College	53	53	0	0
University of Bridgeport	33	17	16	0
University of Connecticut	2,551	1,548	492	511
University of Hartford	303	218	9	76
University of New Haven	837	700	137	0
Wesleyan University	128	128	0	0
Western Connecticut State University	32	32	0	0
Yale University	1,861	1,446	174	241
<b>Maine</b>	<b>752</b>	<b>563</b>	<b>157</b>	<b>32</b>
University of Maine	711	554	157	0
University of New England	41	9	0	32
<b>Massachusetts</b>	<b>22,896</b>	<b>12,953</b>	<b>6,975</b>	<b>2,968</b>
American International College	164	164	0	0
Anna Maria College	102	76	0	26
Assumption College	143	77	0	66
Boston College	678	464	0	214
Boston University	2,631	1,637	586	408
Brandeis University	428	428	0	0
Bridgewater State College	46	46	0	0
Clark University	275	275	0	0
Emerson College	72	0	0	72
Framingham State College	12	12	0	0
Harvard University	3,472	2,848	197	427
MGH Institute of Health Professions	193	6	0	187
Mass College of Pharmacy/Allied Health	45	24	0	22
Massachusetts Institute of Technology	4,243	1,967	2,272	4
Mount Holyoke College	14	14	0	0
Northeastern University	2,581	961	1,155	465
Salem State College	113	20	0	93
Smith College	6	6	0	0
Tufts University	1,044	611	316	117
University of Massachusetts	3,262	2,087	667	508
University of Massachusetts Dartmouth	187	93	67	27
University of Massachusetts Lowell	2,049	838	958	253
Western New England College	238	11	148	79
Williams College	14	14	0	0
Woods Hole Oceanographic Institution	0	0	0	0
Worcester Polytechnic Institute	882	273	609	0
Worcester State College	1	1	0	0
<b>New Hampshire</b>	<b>1,199</b>	<b>849</b>	<b>287</b>	<b>63</b>
Dartmouth College	362	249	113	0
Rivier College	140	140	0	0
University of New Hampshire	697	460	174	63
<b>Rhode Island</b>	<b>2,184</b>	<b>1,493</b>	<b>447</b>	<b>244</b>
Brown University	761	644	117	0
Providence College	0	0	0	0
Rhode Island College	84	84	0	0
University of Rhode Island	1,339	765	330	244
<b>Vermont</b>	<b>684</b>	<b>531</b>	<b>114</b>	<b>39</b>
Goddard College	35	35	0	0
Marlboro College	0	0	0	0
Middlebury College	1	1	0	0
University of Vermont & St Agnc Colleg	648	495	114	39
<b>Middle Atlantic</b>	<b>82,009</b>	<b>53,594</b>	<b>18,141</b>	<b>10,274</b>
<b>New Jersey</b>	<b>11,860</b>	<b>8,111</b>	<b>3,092</b>	<b>657</b>
Drew University	21	21	0	0
Fairleigh Dickinson University	1,005	913	92	0
Kean College of New Jersey	131	131	0	0
Monmouth College(NJ)	250	87	163	0
Montclair State College	512	512	0	0
New Jersey Institute of Technology	1,848	762	1,086	0

See explanatory information, if any, and SOURCE(S) at end of table.

139

**Table E-1. Graduate students in the science, engineering, and health fields  
in all institutions, by geographic division, State, institution,  
and area of study: 1991**

Page 2 of 11

Division, State, and Institution	Total, all surveyed fields	Sciences, total	Engi- neering, total	Health fields
<b>New Jersey, continued</b>				
Princeton University	1,374	997	377	0
Rutgers the State University	4,375	3,196	795	384
Seton Hall University	540	396	0	144
Stevens Institute of Technology	1,343	764	579	0
Trenton State College	35	8	0	27
Univ of Med and Dent of New Jersey	291	239	0	52
William Paterson College	135	85	0	50
<b>New York</b>	<b>47,649</b>	<b>32,380</b>	<b>8,830</b>	<b>6,439</b>
Adelphi University	798	380	0	418
Albany Medical College Grad Studies Pro	87	70	0	17
Alfred University	115	35	80	0
CUNY Bernard Baruch College	471	372	0	99
CUNY Brooklyn College	799	669	0	130
CUNY City College	1,263	650	591	22
CUNY College of Staten Island St George	93	93	0	0
CUNY Graduate School and Univ Center	1,841	1,638	138	65
CUNY Herbert H. Lehman College	61	61	0	0
CUNY Hunter College	749	399	0	350
CUNY John Jay College of Crim Justice	533	533	0	0
CUNY Mt. Sinai Sch of Medicine	164	164	0	0
CUNY Queens College	473	433	0	40
Clarkson University	286	87	199	0
College of New Rochelle	283	127	0	156
College of St Rose	121	16	0	105
Columbia University Main Division	2,964	1,670	743	551
Columbia University Teachers College	2,030	1,383	0	647
Cooper Union	54	0	54	0
Cornell University	3,453	2,450	926	77
Fordham University	598	598	0	0
Hofstra University	508	402	0	106
Iona College	614	445	0	169
Ithaca College	22	0	0	22
Long Island University	1,403	862	0	541
Manhattan College	362	31	331	0
Marist College	293	293	0	0
New School for Social Research	848	848	0	0
New York Institute of Technology	887	702	185	0
New York Medical College	203	160	0	43
New York University	3,315	2,900	0	415
Niagara University	13	13	0	0
Pace University	1,144	918	0	226
Polytechnic University	1,667	561	1,086	0
Pratt Institute	8	0	8	0
Rensselaer Polytechnic Institute	2,036	663	1,373	0
Rochester Institute of Technology	963	675	277	11
Rockefeller University	128	128	0	0
Russell Sage College	776	348	0	428
SUNY - Albany	1,384	1,328	0	56
SUNY - Binghamton	1,214	703	439	72
SUNY - Buffalo	3,445	1,875	1,003	567
SUNY - Coll of Env Science and Forestry	427	338	89	0
SUNY - Health Sci Ctr at Brooklyn	115	98	0	17
SUNY - Health Sci Ctr at Syracuse	82	88	0	14
SUNY - Stony Brook	2,406	1,861	231	314
SUNY College at Brockport	255	216	0	39
SUNY College at Buffalo	24	24	0	0
SUNY College at Cortland	14	14	0	0
SUNY College at Fredonia	21	21	0	0
SUNY College at Geneseo	42	10	0	32
SUNY College at New Paltz	225	225	0	0
SUNY College at Oneonta	5	5	0	0

See explanatory information, if any, and SOURCE(S) at end of table.

**Table E-1. Graduate students in the science, engineering, and health fields  
in all institutions, by geographic division, State, institution,  
and area of study: 1991**

Page 3 of 11

Division, State, and institution	Total, all surveyed fields	Sciences, total	Engi- neering, total	Health fields
<b>New York, continued</b>				
SUNY College at Oswego	216	216	0	0
SUNY College at Plattsburgh	35	35	0	0
SUNY College at Potsdam	2	2	0	0
SUNY College of Technology at Utica/Rom	70	70	0	0
SUNY State College of Optometry	22	0	0	22
Sarah Lawrence College	42	42	0	0
St Bonaventure University	15	15	0	0
St John's University	705	457	0	248
Syracuse University	2,164	1,137	791	236
Union College(NY)	140	40	86	14
University of Rochester	1,422	1,150	200	72
Vassar College	3	3	0	0
Wagner College	96	23	0	73
Yeshiva University	632	607	0	25
<b>Pennsylvania</b>	<b>22,500</b>	<b>13,103</b>	<b>6,219</b>	<b>3,178</b>
Bloomsburg University of Pennsylvania	92	13	0	79
Bryn Mawr College	154	154	0	0
Bucknell University	57	27	30	0
California University of Pennsylvania	209	156	0	53
Carnegie-Mellon University	1,656	1,054	602	0
Clarion University of Pennsylvania	127	81	0	46
Drexel University	1,566	573	993	0
Duquesne University	401	222	0	179
East Stroudsburg Univ of Pennsylvania	103	103	0	0
Edinboro University of Pennsylvania	220	126	0	94
Gannon University	260	89	47	124
Hahnemann University	572	387	0	185
Indiana University of Pennsylvania	140	140	0	0
Kutztown University of Pennsylvania	173	173	0	0
Lehigh University	1,022	388	634	0
Mansfield University of Pennsylvania	16	16	0	0
Marywood College	119	119	0	0
Millersville University of Pennsylvania	124	111	13	0
Pennsylvania State University	4,419	2,475	1,796	148
Phila College of Osteopathic Medicine	0	0	0	0
Philadelphia Coll of Pharmacy and Sci	60	29	0	31
Shippensburg University of Pennsylvania	336	336	0	0
Slippery Rock University of Pennsylvania	190	38	0	152
St Joseph's University	461	239	0	222
Swarthmore College	0	0	0	0
Temple University	1,592	1,100	89	403
The Medical College of Pennsylvania	109	78	0	31
Thomas Jefferson University	269	183	0	86
University of Pennsylvania	2,533	1,836	632	65
University of Pittsburgh	3,944	1,933	816	1,195
University of Scranton	137	105	0	32
Villanova University	959	542	417	0
West Chester University of Pennsylvania	306	269	0	37
Widener University	133	0	133	0
Wilkes University	41	8	17	16
<b>East North Central</b>	<b>83,758</b>	<b>52,431</b>	<b>20,472</b>	<b>10,855</b>
<b>Illinois</b>	<b>24,590</b>	<b>17,027</b>	<b>4,423</b>	<b>3,140</b>
Bradley University	255	70	185	0
Chicago Coll of Osteo Medicine	0	0	0	0
Chicago School of Prof Psych	134	134	0	0
Chicago State University	176	176	0	0
De Paul University	1,489	1,405	0	84
Eastern Illinois University	176	150	0	26
Forest Institute of Prof Psych	206	206	0	0
Governors State University	618	413	0	205
Illinois Institute of Technology	1,818	1,117	701	0
Illinois State University	570	505	0	65
Loyola University of Chicago	755	611	0	144

See explanatory information, if any, and SOURCE(S) at end of table.



**Table E-1. Graduate students in the science, engineering, and health fields  
in all institutions, by geographic division, State, institution,  
and area of study: 1991**

Page 4 of 11

Division, State, and institution	Total, all surveyed fields	Sciences, total	Engi- neering, total	Health fields
Illinois, continued				
Northeastern Illinois University	550	511	0	39
Northern Illinois University	1,231	844	179	208
Northwestern University	2,007	1,167	633	207
Roosevelt University	337	337	0	0
Rush University	479	92	0	387
Sangamon State University	764	690	0	74
Southern Illinois Univ at Carbondale	1,618	1,123	242	253
Southern Illinois Univ at Edwardsville	677	437	100	140
University of Chicago	1,830	1,809	0	21
University of Health Sciences (Chicago)	131	124	0	7
University of Illinois at Chicago	3,355	1,444	943	968
University of Illinois at Urbana	4,938	3,276	1,440	222
Western Illinois University	476	386	0	90
Indiana	10,111	6,806	2,090	1,215
Ball State University	429	335	0	94
Butler University	20	15	0	5
Indiana State University	372	319	35	18
Indiana University	4,135	3,379	45	711
Indiana Wesleyan University	23	0	0	23
Purdue University	4,022	2,051	1,672	299
Rose-Hulman Institute of Technology	120	15	105	0
Saint Francis College	46	46	0	0
University of Evansville	60	6	13	41
University of Notre Dame	822	802	220	0
Valparaiso University	62	38	0	24
Michigan	17,055	9,686	5,393	1,976
Andrews University	283	131	0	152
Central Michigan University	335	292	0	43
Eastern Michigan University	987	732	223	32
Grand Valley State University	232	84	0	148
Michigan State University	3,103	2,406	520	177
Michigan Technological University	483	192	291	0
Northern Michigan University	215	129	0	86
Oakland University	750	311	367	72
University of Detroit	668	435	164	69
University of Michigan	5,252	2,329	2,461	462
Wayne State University	3,056	1,390	1,086	580
Western Michigan University	1,691	1,255	281	155
Ohio	21,944	12,828	6,000	3,018
Air Force Institute of Technology	589	155	434	0
Antioch University	1,593	1,500	93	0
Bowling Green State University	600	582	0	18
Case Western Reserve University	1,669	737	643	289
Cleveland State University	1,179	693	412	74
John Carroll University	51	51	0	0
Kent State University	1,059	807	0	252
Medical College of Ohio at Toledo	290	0	0	290
Miami University	485	443	15	27
NE Ohio Univ Med School	0	0	0	0
Ohio State University	5,439	3,352	1,237	850
Ohio University	1,014	682	277	55
Union Institute	556	519	4	33
University of Akron	1,609	819	495	295
University of Cincinnati	2,721	1,127	1,116	478
University of Dayton	896	229	667	0
University of Toledo	751	377	318	56
Wright State University	1,144	584	309	251
Xavier University	113	63	0	50
Youngstown State University	186	108	78	0
Wisconsin	10,058	6,084	2,468	1,506
Marquette University	808	223	397	188
Medical College of Wisconsin	102	102	0	0
Milwaukee School of Engineering	349	0	349	0
University of Wisconsin - Eau Claire	122	20	0	102

See explanatory information, if any, and SOURCE(S) at end of table.

**Table E-1. Graduate students in the science, engineering, and health fields  
in all institutions, by geographic division, State, institution,  
and area of study: 1991**

Page 5 of 11

Division, State, and Institution	Total, all surveyed fields	Sciences, total	Engi- neering, total	Health fields
<b>Wisconsin, continued</b>				
University of Wisconsin - Green Bay	45	45	0	0
University of Wisconsin - La Crosse	81	55	0	26
University of Wisconsin - Madison	5,914	4,031	1,228	655
University of Wisconsin - Milwaukee	1,827	1,209	416	202
University of Wisconsin - Oshkosh	299	179	0	120
University of Wisconsin - Platteville	23	14	9	0
University of Wisconsin - River Falls	55	55	0	0
University of Wisconsin - Stevens Point	111	48	0	63
University of Wisconsin - Stout	246	55	69	122
University of Wisconsin - Whitewater	76	48	0	28
<b>West North Central</b>	<b>30,873</b>	<b>20,023</b>	<b>6,707</b>	<b>4,143</b>
<b>Iowa</b>	<b>5,740</b>	<b>3,640</b>	<b>1,291</b>	<b>809</b>
Drake University	172	109	0	63
Iowa State University of Sci & Tech	2,818	1,962	849	7
Loras College	23	23	0	0
Maharishi International University	78	78	0	0
Teikyo Marycrest College	38	38	0	0
Univ. of Osteopathic Med & Health Sci	74	0	0	74
University of Iowa	2,420	1,353	442	625
University of Northern Iowa	117	77	0	40
<b>Kansas</b>	<b>5,478</b>	<b>3,500</b>	<b>1,153</b>	<b>825</b>
Emporia State University - Kansas	129	129	0	0
Fort Hays State University	95	95	0	0
Kansas State University	1,532	1,204	289	39
Pittsburg State University	342	294	48	0
University of Kansas	2,403	1,418	501	484
Washburn University of Topeka	32	32	0	0
Wichita State University	945	328	315	302
<b>Minnesota</b>	<b>7,398</b>	<b>5,367</b>	<b>1,238</b>	<b>795</b>
Benildji State University	20	20	0	0
Mankato State University	346	319	0	27
Mayo Graduate School	120	104	0	16
Moorhead State University	184	144	0	40
St Mary's College of Minnesota	938	792	0	146
St. Cloud State University	70	34	0	36
University of Minnesota	5,720	3,954	1,236	530
<b>Missouri</b>	<b>7,421</b>	<b>4,245</b>	<b>1,992</b>	<b>1,184</b>
Central Missouri State University	362	274	41	47
Kirkville College of Osteopathic Med	0	0	0	0
Lincoln University	32	32	0	0
Northeast Missouri State University	28	17	0	11
Northwest Missouri State University	44	44	0	0
Southeast Missouri State University	43	43	0	0
Southwest Missouri State University	217	133	0	84
St. Louis University	870	385	10	475
Univ of Health Sciences (Kansas City)	0	0	0	0
University of Missouri - Columbia	1,983	1,285	526	172
University of Missouri - Kansas City	790	552	0	238
University of Missouri - Rolla	1,261	327	934	0
University of Missouri - St. Louis	281	281	0	0
Washington University	1,510	872	481	157
<b>Nebraska</b>	<b>2,781</b>	<b>1,991</b>	<b>484</b>	<b>306</b>
Craigton University	116	71	0	45
Kearney State College	46	33	0	13
University of Nebraska - Lincoln	1,756	1,238	484	36
University of Nebraska - Omaha	591	591	0	0

See explanatory information, if any, and SOURCE(S) at end of table.

**Table E-1. Graduate students in the science, engineering, and health fields  
in all institutions, by geographic division, State, institution,  
and area of study: 1991**

Page 6 of 11

Division, State, and institution	Total, all surveyed fields	Sciences, total	Engi- neering, total	Health fields
<b>Nebraska, continued</b>				
University of Nebraska Medical Center	272	60	0	212
<b>North Dakota</b>	916	709	156	51
North Dakota State University	615	480	119	16
University of North Dakota	301	229	37	35
<b>South Dakota</b>	1,139	571	395	173
South Dakota School of Mines and Tech	274	78	196	0
South Dakota State University	629	291	199	139
University of South Dakota	236	202	0	34
<b>South Atlantic</b>	71,967	45,141	17,296	9,530
<b>Delaware</b>	1,470	1,003	402	65
Delaware State College	23	23	0	0
University of Delaware	1,447	980	402	65
<b>District of Columbia</b>	8,729	6,057	1,918	754
Catholic University of America	883	425	259	199
Gallaudet University	25	0	0	25
George Washington University	4,544	2,633	1,569	337
Georgetown University	750	633	0	117
Howard University	776	655	90	33
The American University	1,656	1,656	0	0
University of the District of Columbia	93	50	0	43
<b>Florida</b>	14,600	8,579	3,874	2,147
Florida A & M University	182	90	43	49
Florida Atlantic University	860	475	347	38
Florida Institute of Technology	1,028	709	319	0
Florida International University	893	578	162	153
Florida State University	1,503	1,203	157	143
Jacksonville University	26	26	0	0
Nova University	940	70	0	120
University of Central Florida	1,403	612	606	185
University of Florida	3,741	1,972	1,252	517
University of Miami	1,289	837	318	134
University of South Florida	2,334	856	670	808
University of West Florida	401	401	0	0
<b>Georgia</b>	8,701	5,160	2,650	891
Augusta College	49	49	0	0
Clark Atlanta University	282	282	0	0
Emory University	986	549	0	437
Fort Valley State College	73	73	0	0
Georgia College	262	215	0	47
Georgia Institute of Technology	3,326	842	2,484	0
Georgia Southern University	135	135	0	0
Georgia State University	1,149	950	0	199
Institute of Paper Science & Technology	70	0	70	0
Medical College of Georgia	200	82	0	118
Mercer University	116	30	83	3
Morehouse School of Medicine	0	0	0	0
University of Georgia	1,666	1,585	13	68
Valdosta State College	266	247	0	19
West Georgia College	121	121	0	0
<b>Maryland</b>	10,241	6,554	2,024	1,663
Coppin State College	31	31	0	0
Frostburg State University	64	64	0	0
Hood College	391	391	0	0
Johns Hopkins University	1,880	1,029	220	631
Loyola College	808	477	278	51
Morgan State University	57	57	0	0
Towson State University	500	338	0	162
Uniformed Serv Univ of the Hlth Science	118	88	0	30
University of Baltimore	272	272	0	0
University of Maryland - Balt Prof Sch	1,069	355	0	714
University of Maryland - Baltimore Cnty	1,026	803	212	11
University of Maryland - College Park	3,876	2,496	1,314	64
University of Maryland Eastern Shore	104	104	0	0
Washington College	47	47	0	0
<b>North Carolina</b>	10,282	6,809	1,828	1,645
Appalachian State University	242	242	0	0
Duke University	1,412	1,074	264	74
East Carolina University	402	259	0	143
North Carolina A & T State University	253	70	183	0

See explanatory information, if any, and SOURCE(S) at end of table.

**Table E-1. Graduate students in the science, engineering, and health fields  
in all institutions, by geographic division, State, institution,  
and area of study: 1991**

Page 7 of 11

Division, State, and Institution	Total, all surveyed fields	Sciences, total	Engi- neering, total	Health fields
<b>North Carolina, continued</b>				
North Carolina Central University	76	76	0	0
North Carolina State Univ at Raleigh	3,115	1,812	1,223	80
Univ of North Carolina at Chapel Hill	3,101	2,139	41	921
Univ of North Carolina at Charlotte	650	430	117	103
Univ of North Carolina at Greensboro	585	303	0	282
University of North Carolina/Wilmington	74	74	0	0
Wake Forest University	241	229	0	12
Western Carolina University	131	101	0	30
<b>South Carolina</b>	3,993	2,356	1,132	505
Clemson University	1,795	927	802	66
College of Charleston	67	67	0	0
Furman University	7	7	0	0
Medical University of South Carolina	167	154	0	13
University of South Carolina	1,892	1,136	330	426
Winthrop College	65	65	0	0
<b>Virginia</b>	11,588	7,292	2,956	1,340
College of William and Mary	371	355	16	0
Eastern Virginia Medical School	118	118	0	0
George Mason University	2,299	1,786	317	196
Hampton University	110	64	0	46
Hollins College	5	5	0	0
Institute of Textile Technology	30	0	30	0
James Madison University	159	108	0	51
Old Dominion University	1,267	674	426	167
Radford University	228	169	0	59
University of Richmond	28	28	0	0
University of Virginia	1,943	1,242	632	69
Virginia Commonwealth University	1,833	1,128	16	709
Virginia Polytechnic Inst and State Uni	3,113	1,551	1,519	43
Virginia State University	64	64	0	0
<b>West Virginia</b>	2,363	1,331	512	520
Marshall University	261	204	0	57
Univ of West Virginia Coll of Grad Stds	443	299	90	54
University of Charleston	1	1	0	0
West Virginia Institute of Technology	15	0	15	0
West Virginia Sch of Osteopathic Med	0	0	0	0
West Virginia University	1,643	827	407	409
<b>East South Central</b>	20,271	12,797	4,868	2,606
<b>Alabama</b>	6,486	3,606	1,808	1,072
Alabama A & M University	254	254	0	0
Alabama State University	10	10	0	0
Auburn University	1,844	1,142	590	112
Jacksonville State University	151	151	0	0
The University of Alabama	901	574	308	19
The University of Alabama at Birmingham	1,446	591	168	687
The University of Alabama in Huntsville	1,051	382	636	33
Troy State University in Montgomery	169	169	0	0
Tuskegee University	116	62	35	19
University of Montevallo	29	0	0	29
University of South Alabama	515	271	71	173
<b>Kentucky</b>	4,119	2,692	882	545
Eastern Kentucky University	171	171	0	0
Morehead State University	69	69	0	0
Murray State University	356	193	52	111
Spalding University	143	107	0	33
University of Kentucky	2,019	1,327	363	329
University of Louisville	1,156	617	467	72
Western Kentucky University	208	208	0	0
<b>Mississippi</b>	2,847	2,071	448	328
Jackson State University	269	269	0	0
Mississippi State University	1,161	802	345	14
Mississippi University for Women	28	0	0	28
University of Mississippi	805	556	103	144
University of Southern Mississippi	584	442	0	142
<b>Tennessee</b>	6,819	4,428	1,730	661
Austin Peay State University	37	37	0	0
East Tennessee State University	390	317	0	73
Fisk University	29	29	0	0

See explanatory information, if any, and SOURCE(S) at end of table.

**Table E-1. Graduate students in the science, engineering, and health fields  
in all institutions, by geographic division, State, institution,  
and area of study: 1991**

Page 8 of 11

Division, State, and Institution	Total, all surveyed fields	Sciences, total	Engi- neering, total	Health fields
Tennessee, continued				
Meharry Medical College	54	54	0	0
Memphis State University	952	719	165	68
Middle Tennessee State University	529	529	0	0
Tennessee State University	226	185	41	0
Tennessee Technological University	323	153	170	0
University of Tennessee at Chattanooga	261	184	77	0
University of Tennessee at Knoxville	2,789	1,412	1,009	368
University of Tennessee, Memphis	213	112	0	101
Vanderbilt University	1,016	697	268	51
<b>West South Central</b>	<b>45,631</b>	<b>27,198</b>	<b>11,757</b>	<b>6,676</b>
Arkansas				
Arkansas State University	357	254	0	103
University of Arkansas	1,269	600	669	0
University of Arkansas - Med Sci Campus	226	61	0	165
University of Arkansas at Little Rock	183	152	0	31
University of Central Arkansas	277	158	0	119
Louisiana				
Grambling State University	9	9	0	0
Louisiana State University System	2,848	1,970	768	110
Louisiana Tech University	301	74	210	17
Loyola University in New Orleans	2	2	0	0
McNeese State University	142	126	16	0
Nicholls State University	40	40	0	0
Northeast Louisiana University	200	140	0	60
Northwest State University	161	44	0	117
Southeastern Louisiana University	32	32	0	0
Southern University A & M College	212	212	0	0
Tulane University of Louisiana	1,232	597	154	481
University of Southwestern Louisiana	607	453	109	45
Xavier University	135	0	0	135
<b>Oklahoma</b>	<b>4,849</b>	<b>2,629</b>	<b>1,489</b>	<b>731</b>
East Central University	8	8	0	0
Northeastern State University	204	103	70	31
Oklahoma State University	1,813	1,186	608	19
Southwestern Oklahoma State University	15	15	0	0
University of Oklahoma	2,529	1,143	705	681
University of Tulsa	280	174	106	0
<b>Texas</b>	<b>32,549</b>	<b>19,645</b>	<b>8,342</b>	<b>4,562</b>
Abilene Christian University	102	76	0	26
Angelo State University	123	123	0	0
Baylor College of Dentistry	48	6	0	42
Baylor College of Medicine	303	246	0	57
Baylor University	504	344	0	160
Corpus Christi State University	189	134	0	55
East Texas State University	346	346	0	0
Incarnate Word College	140	74	0	66
Lamar University	512	216	239	57
Midwestern State University	142	142	0	0
Prairie View A & M University	143	123	20	0
Rice University	825	582	243	0
Sam Houston State University	362	362	0	0
Southern Methodist University	815	310	505	0
Southwest Texas State University	710	600	0	110
St Mary's University of San Antonio	45	0	45	0
Stephen F. Austin State University	201	201	0	0
Sul Ross State University	43	43	0	0
Tarleton State University	47	47	0	0
Texas A & I University	351	171	180	0
Texas A & M University	5,009	3,363	1,631	15
Texas Christian University	143	124	0	19
Texas College of Osteopathic Medicine	89	0	0	89
Texas Southern University	240	240	0	0
Texas Tech University	1,464	1,009	362	93
Texas Woman's University	1,809	510	0	1,099
The University of Texas - Pan American	12	12	0	0

See explanatory information, if any, and SOURCE(S) at end of table.



**Table E-1. Graduate students in the science, engineering, and health fields  
in all institutions, by geographic division, State, institution,  
and area of study: 1991**

Page 9 of 11

Division, State, and institution	Total, all surveyed fields	Sciences, total	Engi- neering, total	Health fields
<b>Texas, continued</b>				
Trinity University	118	20	0	98
Univ of Texas Hlth Sci Ctr San Antonio	500	133	0	367
Univ of Texas Hlth Sci Ctr at Houston	962	428	0	534
Univ of Texas MD Anderson Cancer Center	0	0	0	0
Univ of Texas Med Branch at Galveston	355	128	0	227
Univ of Texas SW Medical Ctr at Dallas	355	259	25	71
Univ of Texas at Arlington	2,087	918	947	222
Univ of Texas at Austin	4,971	2,538	2,021	412
Univ of Texas at Dallas	1,195	786	240	169
Univ of Texas at El Paso	799	363	293	143
University of Central Texas	197	197	0	0
University of Houston - Victoria	27	27	0	0
University of Houston at Clear Lake Cit	1,287	1,097	135	55
University of Houston-University Park	3,209	1,724	1,321	164
University of North Texas	1,152	1,009	34	109
University of Texas at San Antonio	310	225	85	0
University of Texas at Tyler	220	187	0	33
University of Texas of the Permian Basi	57	56	1	0
West Texas State University	231	146	15	70
<b>Mountain</b>	<b>29,434</b>	<b>18,968</b>	<b>7,557</b>	<b>2,909</b>
<b>Arizona</b>	<b>7,648</b>	<b>4,857</b>	<b>2,145</b>	<b>646</b>
Arizona State University	3,318	1,686	1,392	240
Northern Arizona University	939	783	0	156
University of Arizona	3,391	2,388	753	250
<b>Colorado</b>	<b>9,350</b>	<b>5,716</b>	<b>2,526</b>	<b>1,108</b>
Colorado School of Mines	781	553	228	0
Colorado State University	2,010	1,353	440	217
National Technological University	657	150	507	0
University of Colorado	4,544	2,542	1,343	659
University of Denver	991	936	8	47
University of Northern Colorado	367	182	0	185
<b>Idaho</b>	<b>1,512</b>	<b>961</b>	<b>371</b>	<b>180</b>
Idaho State University	444	233	31	180
University of Idaho	1,068	728	340	0
<b>Montana</b>	<b>1,137</b>	<b>922</b>	<b>155</b>	<b>60</b>
Montana College Mineral Sci & Technolog	91	9	64	18
Montana State University	521	393	91	37
University of Montana	525	520	0	5
<b>Nevada</b>	<b>1,296</b>	<b>935</b>	<b>229</b>	<b>132</b>
University of Nevada at Las Vegas	425	320	37	68
University of Nevada at Reno	871	615	192	64
<b>New Mexico</b>	<b>3,176</b>	<b>2,129</b>	<b>851</b>	<b>196</b>
Eastern New Mexico University	103	92	0	11
New Mexico Highlands University	54	54	0	0
New Mexico Institute of Mining and Tech	253	184	69	0
New Mexico State University	956	656	300	0
University of New Mexico	1,810	1,143	482	185
<b>Utah</b>	<b>4,288</b>	<b>2,701</b>	<b>1,103</b>	<b>482</b>
Brigham Young University	1,013	738	226	49
University of Utah	2,025	1,092	561	372
Utah State University	1,248	871	316	61
<b>Wyoming</b>	<b>1,029</b>	<b>747</b>	<b>177</b>	<b>105</b>
University of Wyoming	1,029	747	177	105
<b>Pacific</b>	<b>73,975</b>	<b>47,670</b>	<b>18,190</b>	<b>8,115</b>
<b>Alaska</b>	<b>690</b>	<b>451</b>	<b>211</b>	<b>28</b>
University of Alaska Southeast	26	26	0	0
University of Alaska at Anchorage	184	54	102	26
University of Alaska at Fairbanks	480	371	109	0
<b>California</b>	<b>60,097</b>	<b>38,083</b>	<b>15,348</b>	<b>6,666</b>
Azusa Pacific University	269	174	0	95
Biola University	188	188	0	0
Calif Poly State Univ at San Luis Obisp	404	279	125	0

See explanatory information, if any, and SOURCE(S) at end of table.

**Table E-1. Graduate students in the science, engineering, and health fields  
in all institutions, by geographic division, State, institution,  
and area of study: 1991**

Page 10 of 11

Division, State, and institution	Total, all surveyed fields	Sciences, total	Engi- neering, total	Health fields
California, continued				
Calif Sch of Prof Psych - Fresno	366	366	0	0
Calif Sch of Prof Psych - Los Angeles	534	534	0	0
Calif Sch of Prof Psych - San Diego	617	617	0	0
Calif Sch of Prof Psych-Berkeley/Alameda	519	519	0	0
Calif State Polytechnic Univ at Pomona	417	291	126	0
Calif State Univ at Dominguez Hills	486	396	90	0
Calif State Univ at Fullerton	1,125	806	248	71
Calif State Univ at Hayward	906	840	0	66
Calif State Univ at Long Beach	2,236	1,226	719	291
Calif State Univ at Los Angeles	1,114	663	186	265
Calif State Univ at San Bernardino	218	189	0	29
Calif State Univ of Stanislaus	153	153	0	0
Calif State University at Chico	504	434	15	55
Calif State University at Fresno	816	668	36	112
Calif State University at Northridge	1,680	701	640	339
Calif State University at Sacramento	896	532	223	141
California Institute of Integral Studies	382	382	0	0
California Institute of Technology	1,125	698	427	0
California State Univ - Bakersfield	182	140	0	42
Chapman University	198	152	0	47
Charles R. Drew Univ of Medicine & Sci	0	0	0	0
Claremont Univ Center & Graduate School	552	552	0	0
Dominican College of San Rafael	109	109	0	0
Fuller Theological Seminary	343	343	0	0
Golden Gate University	192	192	0	0
Harvey Mudd College	6	0	6	0
Humboldt State University	330	271	54	5
John F Kennedy University	850	825	0	25
Loma Linda University	468	105	0	383
Loyola Marymount University	207	150	57	0
National University	767	567	200	0
Occidental College	1	1	0	0
Pacific Grad School of Prof Psych	341	341	0	0
Pacific States University	25	2	23	0
Pepperdine University	935	935	0	0
Rand Graduate School of Policy Studies	60	60	0	0
San Diego State University	2,166	1,243	286	637
San Francisco State University	1,292	905	0	387
San Jose State University	2,151	1,041	847	263
Santa Clara University	1,222	584	638	0
Sonoma State University	226	158	0	70
Stanford University	4,422	2,007	2,330	85
The Fielding Institute	478	478	0	0
The Wright Institute	199	199	0	0
US International University	492	492	0	0
US Naval Postgraduate School	1,340	541	799	0
University of Calif at Berkeley	4,979	2,946	1,570	463
University of Calif at Davis	2,579	1,963	606	10
University of Calif at Irvine	1,344	947	359	38
University of Calif at Los Angeles	4,171	2,428	783	960
University of Calif at Riverside	733	733	0	0
University of Calif at San Diego	1,902	1,392	412	96
University of Calif at San Francisco	1,034	275	23	736
University of Calif at Santa Barbara	1,530	1,008	474	48
University of Calif at Santa Cruz	628	584	44	0
University of La Verne	320	125	0	195
University of Redlands	51	0	0	51
University of San Diego	188	42	0	146
University of San Francisco	191	63	88	40
University of Southern California	5,575	2,450	2,727	398

See explanatory information, if any, and SOURCE(S) at end of table.

**Table E-1. Graduate students in the science, engineering, and health fields  
in all institutions, by geographic division, State, institution,  
and area of study: 1991**

Page 11 of 11

Division, State, and institution	Total, all surveyed fields	Sciences, total	Engi- neering, total	Health fields
California, continued				
University of the Pacific	154	54	5	95
West Coast University	228	46	182	0
Hawaii	2,092	1,507	216	369
University of Hawaii at Manoa	2,092	1,507	216	369
Oregon	4,161	3,095	862	224
Oregon Grad Inst of Science & Technolog	213	142	71	0
Oregon Health Sciences University	119	118	0	1
Oregon State University	1,861	1,262	497	102
Pacific University	9	0	0	9
Portland State University	1,051	693	275	83
Southern Oregon State College	50	50	0	0
University of Oregon	830	830	0	0
University of Portland	48	0	19	29
Washington	6,915	4,534	1,553	828
Central Washington University	132	132	0	0
Eastern Washington University	297	257	0	40
Gonzaga University	9	0	9	0
Pacific Lutheran University	81	57	0	24
Saint Martin's College	30	0	30	0
Seattle University	239	125	114	0
University of Washington	4,454	2,738	1,138	578
Walla Walla College	5	5	0	0
Washington State University	1,353	981	262	110
Western Washington University	300	239	0	61
Whitworth College	15	0	0	15
Outlying Areas	2,841	1,852	168	821
Guam	12	12	0	0
University of Guam	12	12	0	0
Puerto Rico	2,829	1,840	168	821
Caribbean Center for Advanced Studies	386	386	0	0
Catholic University of Puerto Rico	52	0	0	52
Ponce School of Medicine	15	15	0	0
University of Puerto Rico	439	271	168	0
University of Puerto Rico - Rio Piedras	1,213	1,055	0	158
University of Puerto Rico Med Sci Campu	724	113	0	611

NOTE: Includes medical schools

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

100

**Table E-2. Graduate science students in all institutions,  
by geographic division, State, institution,  
and major field of science: 1991**

Page 1 of 11

Division, State, and Institution	Total, sciences	Physical sciences	Earth, atmos., & ocean sciences	Mathe- matical sciences	Computer sciences	Agricul- tural sciences	Bio- logical sciences	Psychol- ogy	Social sciences
<b>Total, all institutions</b>	<b>300,833</b>	<b>34,900</b>	<b>14,747</b>	<b>19,992</b>	<b>34,728</b>	<b>11,475</b>	<b>52,120</b>	<b>51,592</b>	<b>81,279</b>
<b>New England</b>	<b>21,159</b>	<b>3,239</b>	<b>1,146</b>	<b>1,105</b>	<b>2,637</b>	<b>488</b>	<b>4,421</b>	<b>2,511</b>	<b>5,612</b>
<b>Connecticut</b>	<b>4,770</b>	<b>503</b>	<b>221</b>	<b>257</b>	<b>787</b>	<b>39</b>	<b>1,119</b>	<b>678</b>	<b>1,166</b>
Central Connecticut State University	32	0	0	22	0	0	0	10	0
Connecticut College	31	0	0	0	0	0	4	27	0
Quinnipiac College	0	0	0	0	0	0	0	0	0
Southern Connecticut State University	110	8	0	0	0	0	65	37	0
St. Joseph College	118	34	0	0	0	0	32	52	0
The Hartford Graduate Center	337	0	0	0	337	0	0	0	0
Trinity College	53	0	0	1	0	0	0	0	52
University of Bridgeport	17	2	0	0	5	0	3	7	0
University of Connecticut	1,548	149	60	133	96	18	373	259	460
University of Hartford	218	7	0	0	0	0	22	81	108
University of New Haven	700	0	96	18	289	0	42	105	150
Wesleyan University	128	54	2	20	0	0	45	6	1
Western Connecticut State University	32	7	22	3	0	0	0	0	0
Yale University	1,446	242	41	60	60	21	533	94	395
<b>Maine</b>	<b>563</b>	<b>53</b>	<b>62</b>	<b>12</b>	<b>14</b>	<b>102</b>	<b>138</b>	<b>62</b>	<b>120</b>
University of Maine	554	53	62	12	14	102	138	53	120
University of New England	9	0	0	0	0	0	0	9	0
<b>Massachusetts</b>	<b>12,953</b>	<b>2,272</b>	<b>619</b>	<b>629</b>	<b>1,429</b>	<b>205</b>	<b>2,512</b>	<b>1,355</b>	<b>3,932</b>
American International College	164	0	0	0	0	0	0	111	53
Anna Maria College	76	0	0	0	0	0	25	51	0
Assumption College	77	0	0	0	0	0	0	77	0
Boston College	464	94	37	26	0	0	43	21	243
Boston University	1,637	191	22	58	245	0	440	300	380
Brandeis University	428	86	0	38	30	0	119	33	122
Bridgewater State College	46	3	0	0	0	0	7	36	0
Clark University	275	34	24	3	0	0	16	58	140
Emerson College	0	0	0	0	0	0	0	0	0
Framingham State College	12	0	0	0	0	0	12	0	0
Harvard University	2,846	370	52	110	0	4	726	81	1,505
MGH Institute of Health Professions	6	0	0	0	0	0	6	0	0
Mass College of Pharmacy/Allied Health	24	15	0	0	0	0	9	0	0
Massachusetts Institute of Technology	1,967	559	267	121	198	0	237	55	530
Mount Holyoke College	14	2	0	0	0	0	7	5	0
Northeastern University	961	167	0	81	251	0	97	40	325
Salem State College	20	0	0	20	0	0	0	0	0
Smith College	6	0	0	0	0	0	6	0	0
Tufts University	611	89	0	15	15	0	259	135	98
University of Massachusetts	2,087	317	125	66	236	201	425	249	468
University of Massachusetts Dartmouth	93	33	0	0	19	0	17	24	0
University of Massachusetts Lowell	838	288	92	70	236	0	30	79	43
Western New England College	11	0	0	0	0	0	0	0	11
Williams College	14	0	0	0	0	0	0	0	14
Woods Hole Oceanographic Institution	0	0	0	0	0	0	0	0	0
Worcester Polytechnic Institute	273	24	0	21	198	0	30	0	0
Worcester State College	1	0	0	0	0	0	1	0	0
<b>New Hampshire</b>	<b>849</b>	<b>157</b>	<b>69</b>	<b>49</b>	<b>195</b>	<b>62</b>	<b>209</b>	<b>45</b>	<b>63</b>
Dartmouth College	249	66	19	20	21	0	108	15	0
Rivier College	140	0	0	0	140	0	0	0	0
University of New Hampshire	460	91	50	29	34	62	101	30	63
<b>Rhode Island</b>	<b>1,493</b>	<b>204</b>	<b>164</b>	<b>129</b>	<b>185</b>	<b>34</b>	<b>262</b>	<b>260</b>	<b>255</b>
Brown University	644	141	39	77	102	0	95	15	175
Providence College	0	0	0	0	0	0	0	0	0
Rhode Island College	84	2	0	19	0	0	15	48	0
University of Rhode Island	765	61	125	33	83	34	152	197	80
<b>Vermont</b>	<b>531</b>	<b>50</b>	<b>11</b>	<b>29</b>	<b>27</b>	<b>46</b>	<b>181</b>	<b>111</b>	<b>76</b>
Goddard College	35	0	0	0	0	0	0	17	18
Marlboro College	0	0	0	0	0	0	0	0	0
Middlebury College	1	0	0	0	0	0	1	0	0
University of Vermont & St Agric Colleg	495	50	11	29	27	46	180	94	58
<b>Middle Atlantic</b>	<b>53,594</b>	<b>6,222</b>	<b>2,070</b>	<b>3,228</b>	<b>8,685</b>	<b>671</b>	<b>8,380</b>	<b>8,890</b>	<b>15,448</b>
<b>New Jersey</b>	<b>8,111</b>	<b>959</b>	<b>514</b>	<b>507</b>	<b>1,901</b>	<b>71</b>	<b>1,428</b>	<b>874</b>	<b>1,857</b>
Drew University	21	0	0	0	0	0	0	0	21
Fairleigh Dickinson University	913	54	0	6	282	0	47	240	284
Kean College of New Jersey	131	0	0	0	0	0	0	131	0
Monmouth College(NJ)	87	0	0	0	87	0	0	0	0
Montclair State College	512	13	118	74	105	0	27	90	85
New Jersey Institute of Technology	762	7	107	40	608	0	0	0	0

See explanatory information, if any, and SOURCE(S) at end of table.

**Table E-2. Graduate science students in all institutions,  
by geographic division, State, institution,  
and major field of science: 1991**

Page 2 of 11

Division, State, and institution	Total, sciences	Physical sciences	Earth, atmos., & ocean sciences	Mathe- matical sciences	Computer sciences	Agricul- tural sciences	Bio- logical sciences	Psychol- ogy	Social sciences
<b>New Jersey, continued</b>									
Princeton University	997	302	40	73	51	0	107	42	382
Rutgers the State University	3,196	385	249	236	190	71	901	163	1,001
Seton Hall University	396	78	0	4	0	0	74	208	32
Stevens Institute of Technology	764	120	0	66	578	0	0	0	0
Trenton State College	8	0	0	8	0	0	0	0	0
Univ of Med and Dent of New Jersey	239	0	0	0	0	0	239	0	0
William Paterson College	85	0	0	0	0	0	33	0	52
<b>New York</b>	<b>32,380</b>	<b>3,342</b>	<b>918</b>	<b>1,856</b>	<b>5,254</b>	<b>382</b>	<b>4,827</b>	<b>6,119</b>	<b>9,682</b>
Adelphi University	380	29	14	22	0	0	39	275	1
Albany Medical College Grad Studies Pro	70	0	0	0	0	0	70	0	0
Alfred University	35	0	0	0	0	0	0	35	0
CUNY Bernard Baruch College	372	0	0	28	79	0	0	20	245
CUNY Brooklyn College	669	59	26	40	275	0	36	64	169
CUNY City College	650	45	14	30	361	0	35	85	80
CUNY College of Staten Island St George	93	0	26	0	67	0	0	0	0
CUNY Graduate School and Univ Center	1,638	294	0	86	0	0	356	180	722
CUNY Herbert H. Lehman College	61	0	0	46	0	0	15	0	0
CUNY Hunter College	399	28	0	15	21	0	72	44	219
CUNY John Jay College of Crim Justice	533	0	0	0	0	0	29	139	365
CUNY Mt. Sinai Sch of Medicine	164	0	0	0	0	0	164	0	0
CUNY Queens College	433	16	12	17	153	0	8	117	110
Clarkson University	87	75	0	12	0	0	0	0	0
College of New Rochelle	127	0	0	0	0	0	0	127	0
College of St Rose	16	0	0	0	0	0	4	0	12
Columbia University Main Division	1,670	233	106	64	107	0	403	30	727
Columbia University Teachers College	1,383	0	0	207	0	0	0	865	311
Cooper Union	0	0	0	0	0	0	0	0	0
Cornell University	2,450	397	75	186	110	295	771	67	549
Fordham University	598	0	0	4	0	0	54	200	340
Hofstra University	402	0	0	11	98	0	36	252	5
Iona College	445	0	0	0	315	0	10	120	0
Ithaca College	0	0	0	0	0	0	0	0	0
Long Island University	862	30	0	29	92	0	126	273	312
Manhattan College	31	0	0	0	0	0	31	0	0
Marist College	293	0	0	0	217	0	0	76	0
New School for Social Research	848	0	0	0	0	0	0	292	556
New York Institute of Technology	702	0	0	0	529	0	52	121	0
New York Medical College	160	0	0	0	0	0	160	0	0
New York University	2,900	181	49	181	290	0	271	409	1,519
Niagara University	13	0	0	0	0	0	13	0	0
Pace University	918	0	0	0	806	0	0	108	4
Polytechnic University	581	204	0	37	340	0	0	0	0
Pratt Institute	0	0	0	0	0	0	0	0	0
Rensselaer Polytechnic Institute	663	210	29	61	185	0	23	32	123
Rochester Institute of Technology	675	20	0	112	508	0	0	35	0
Rockefeller University	128	8	0	0	0	0	120	0	0
Russell Sage College	348	0	0	0	0	0	0	108	240
SUNY - Albany	1,328	107	59	70	97	0	98	172	725
SUNY - Binghamton	703	77	41	59	0	0	53	97	376
SUNY - Buffalo	1,875	317	92	92	130	0	411	429	404
SUNY - Coll of Env Science and Forestry	338	44	89	0	0	87	118	0	0
SUNY - Health Sci Ctr at Brooklyn	98	0	0	0	0	0	98	0	0
SUNY - Health Sci Ctr at Syracuse	68	0	0	0	0	0	68	0	0
SUNY - Stony Brook	1,861	347	186	215	135	0	328	157	493
SUNY College at Brockport	216	0	0	21	0	0	13	33	149
SUNY College at Buffalo	24	10	0	0	0	0	14	0	0
SUNY College at Cortland	14	0	0	0	0	0	0	14	0
SUNY College at Fredonia	21	3	1	0	0	0	17	0	0
SUNY College at Geneseo	10	0	0	0	0	0	10	0	0
SUNY College at New Paltz	225	10	14	58	0	0	18	53	72
SUNY College at Oneonta	5	0	1	0	0	0	4	0	0

See explanatory information, if any, and SOURCE(S) at end of table.



**Table E-2. Graduate science students in all institutions,  
by geographic division, State, institution,  
and major field of science: 1991**

Page 3 of 11

Division, State, and institution	Total, sciences	Physical sciences	Earth, atmos., & ocean sciences	Mathe- matical sciences	Computer sciences	Agricul- tural sciences	Bio- logical sciences	Psychol- ogy	Social sciences
<b>New York, continued</b>									
SUNY College at Oswego	216	25	0	0	0	0	0	191	0
SUNY College at Plattsburgh	35	4	0	0	0	0	9	22	0
SUNY College at Potsdam	2	0	0	2	0	0	0	0	0
SUNY College of Technology at Utica/Rom	70	0	0	0	70	0	0	0	0
SUNY State College of Optometry	0	0	0	0	0	0	0	0	0
Sarah Lawrence College	42	0	0	0	0	0	42	0	0
St Bonaventure University	15	5	0	0	0	0	5	5	0
St John's University	457	13	0	15	0	0	56	239	134
Syracuse University	1,137	155	31	77	192	0	75	110	497
Union College(NY)	40	0	0	0	38	0	2	0	0
University of Rochester	1,150	394	53	59	39	0	295	87	223
Vassar College	3	2	0	0	0	0	1	0	0
Wagner College	23	0	0	0	0	0	23	0	0
Yeshiva University	607	0	0	0	0	0	171	436	0
<b>Pennsylvania</b>	<b>13,103</b>	<b>1,921</b>	<b>638</b>	<b>865</b>	<b>1,530</b>	<b>218</b>	<b>2,125</b>	<b>1,897</b>	<b>3,909</b>
Bloomsburg University of Pennsylvania	13	0	0	0	0	0	13	0	0
Bryn Mawr College	154	29	7	8	0	0	8	91	11
Bucknell University	27	9	0	4	0	0	7	7	0
California University of Pennsylvania	156	0	20	0	39	0	23	39	35
Carnegie-Mellon University	1,054	114	0	65	193	0	56	36	590
Clanor University of Pennsylvania	81	0	0	0	0	0	11	0	70
Drexel University	573	126	174	128	0	0	108	37	0
Duquesne University	222	35	0	0	0	0	26	137	24
East Stroudsburg Univ of Pennsylvania	103	4	0	0	30	0	45	0	24
Edinboro University of Pennsylvania	126	0	0	0	0	0	15	92	19
Gannon University	89	0	0	0	0	0	0	80	9
Hahnemann University	387	0	0	0	0	12	162	213	0
Indiana University of Pennsylvania	140	36	0	21	0	0	13	70	0
Kutztown University of Pennsylvania	173	0	0	8	26	0	0	94	45
Lehigh University	388	183	23	55	0	0	33	57	37
Mansfield University of Pennsylvania	16	0	0	0	0	0	0	16	0
Marywood College	119	0	0	0	0	0	0	58	61
Millersville University of Pennsylvania	111	0	1	8	0	0	2	100	0
Pennsylvania State University	2,475	450	284	142	95	206	441	268	589
Phila College of Osteopathic Medicine	0	0	0	0	0	0	0	0	0
Philadelphia Coll of Pharmacy and Sci	29	9	0	0	0	0	20	0	0
Shippensburg University of Pennsylvania	336	7	45	28	75	0	23	34	124
Slippery Rock University of Pennsylvania	38	0	0	0	0	0	0	38	0
St Joseph's University	239	33	0	0	111	0	0	0	95
Swarthmore College	0	0	0	0	0	0	0	0	0
Temple University	1,100	103	14	150	138	0	187	118	390
The Medical College of Pennsylvania	78	0	0	0	0	0	78	0	0
Thomas Jefferson University	183	0	0	0	0	0	183	0	0
University of Pennsylvania	1,836	312	12	39	159	0	390	3	866
University of Pittsburgh	1,933	315	35	111	326	0	164	106	876
University of Scranton	105	16	0	0	23	0	33	33	0
Villanova University	542	110	0	85	246	0	63	38	0
West Chester University of Pennsylvania	269	27	23	8	69	0	21	77	44
Widener University	0	0	0	0	0	0	0	0	0
Wilkes University	8	3	0	5	0	0	0	0	0
<b>East North Central</b>	<b>52,431</b>	<b>6,581</b>	<b>2,336</b>	<b>4,131</b>	<b>5,051</b>	<b>1,538</b>	<b>8,664</b>	<b>8,826</b>	<b>15,304</b>
<b>Illinois</b>	<b>17,027</b>	<b>1,868</b>	<b>434</b>	<b>1,266</b>	<b>2,865</b>	<b>307</b>	<b>2,687</b>	<b>2,486</b>	<b>5,114</b>
Bradley University	70	2	0	0	53	0	5	10	0
Chicago Coll of Osteo Medicine	0	0	0	0	0	0	0	0	0
Chicago School of Prof Psych	134	0	0	0	0	0	0	134	0
Chicago State University	176	0	0	19	0	0	17	0	140
De Paul University	1,405	43	0	54	930	0	14	110	254
Eastern Illinois University	150	13	0	18	0	0	38	37	44
Forest Institute of Prof Psych	206	0	0	0	0	0	0	206	0
Governors State University	413	29	0	0	28	0	33	181	142
Illinois Institute of Technology	1,117	52	0	14	795	0	125	131	0
Illinois State University	505	42	0	52	79	0	81	133	118
Loyola University of Chicago	611	45	0	86	0	0	147	211	122

See explanatory information, if any, and SOURCE(S) at end of table.

**Table E-2. Graduate science students in all institutions,  
by geographic division, State, institution,  
and major field of science: 1991**

Page 4 of 11

Division, State, and institution	Total, sciences	Physical sciences	Earth, atmos., & ocean sciences	Mathe- matical sciences	Computer sciences	Agricul- tural sciences	Bio- logical sciences	Psychol- ogy	Social sciences
<b>Illinois, continued</b>									
Northeastern Illinois University	511	34	9	64	52	0	35	0	317
Northern Illinois University	844	87	39	110	116	0	88	92	312
Northwestern University	1,167	254	17	45	173	0	265	83	330
Roosevelt University	337	15	0	11	29	0	6	47	229
Rush University	92	0	0	0	0	0	91	1	0
Sangamon State University	690	0	84	66	89	0	28	234	189
Southern Illinois Univ at Carbondale	1,123	68	46	43	49	44	271	247	355
Southern Illinois Univ at Edwardsville	437	32	104	49	0	0	24	66	162
University of Chicago	1,809	331	44	124	43	0	316	113	838
University of Health Sciences (Chicago)	124	0	0	0	0	0	58	66	0
University of Illinois at Chicago	1,444	184	25	218	0	0	336	103	578
University of Illinois at Urbana	3,276	608	66	277	376	263	653	181	852
Western Illinois University	386	29	0	16	53	0	56	100	132
<b>Indiana</b>	<b>6,806</b>	<b>1,007</b>	<b>195</b>	<b>499</b>	<b>408</b>	<b>196</b>	<b>1,025</b>	<b>774</b>	<b>2,702</b>
Ball State University	335	23	14	32	71	0	50	71	74
Butler University	15	8	0	0	0	0	0	0	7
Indiana State University	319	13	0	20	0	0	55	60	171
Indiana University	3,379	325	106	141	203	0	412	235	1,957
Indiana Wesleyan University	0	0	0	0	0	0	0	0	0
Purdue University	2,051	466	75	264	134	196	452	242	242
Rose-Hulman Institute of Technology	15	15	0	0	0	0	0	0	0
Saint Francis College	46	0	0	0	0	0	0	46	0
University of Evansville	6	0	0	0	0	0	0	6	0
University of Notre Dame	602	177	0	42	0	0	56	77	250
Valparaiso University	38	0	0	0	0	0	0	37	1
<b>Michigan</b>	<b>9,686</b>	<b>1,247</b>	<b>537</b>	<b>927</b>	<b>619</b>	<b>407</b>	<b>1,607</b>	<b>1,381</b>	<b>2,961</b>
Andrews University	131	0	0	0	22	0	18	91	0
Central Michigan University	292	41	0	21	7	0	30	128	65
Eastern Michigan University	732	90	0	177	0	0	70	121	274
Grand Valley State University	84	0	0	0	27	0	0	0	57
Michigan State University	2,406	358	109	206	160	361	488	149	575
Michigan Technological University	192	57	26	16	20	43	30	0	0
Northern Michigan University	129	4	0	0	0	0	26	0	99
Oakland University	311	35	0	185	0	0	16	0	75
University of Detroit	435	54	0	1	58	0	5	218	99
University of Michigan	2,329	345	340	182	0	3	541	250	668
Wayne State University	1,390	221	6	52	198	0	323	230	360
Western Michigan University	1,255	42	56	87	127	0	60	194	689
<b>Ohio</b>	<b>12,828</b>	<b>1,753</b>	<b>721</b>	<b>969</b>	<b>847</b>	<b>300</b>	<b>2,108</b>	<b>3,191</b>	<b>2,939</b>
Air Force Institute of Technology	155	0	0	51	83	0	0	0	21
Antioch University	1,500	0	135	0	0	95	0	1,208	62
Bowling Green State University	582	49	14	78	53	0	86	117	185
Case Western Reserve University	737	128	1	60	20	0	380	46	102
Cleveland State University	693	63	0	17	230	0	60	105	218
John Carroll University	51	27	0	8	0	0	16	0	0
Kent State University	807	110	51	72	82	0	135	119	238
Medical College of Ohio at Toledo	0	0	0	0	0	0	0	0	0
Miami University	443	62	62	30	0	0	85	108	96
NE Ohio Univ Med School	0	0	0	0	0	0	0	0	0
Ohio State University	3,352	524	212	313	203	204	724	240	932
Ohio University	682	101	72	95	0	0	94	150	170
Union Institute	519	0	6	3	10	1	15	442	42
University of Akron	819	316	26	59	0	0	48	113	257
University of Cincinnati	1,127	216	70	64	0	0	264	176	337
University of Dayton	229	0	0	9	67	0	20	44	89
University of Toledo	377	85	27	41	0	0	34	89	101
Wright State University	584	57	45	43	99	0	120	171	49
Xavier University	63	0	0	0	0	0	0	63	0
Youngstown State University	108	15	0	26	0	0	27	0	40
<b>Wisconsin</b>	<b>6,084</b>	<b>706</b>	<b>449</b>	<b>470</b>	<b>312</b>	<b>328</b>	<b>1,237</b>	<b>994</b>	<b>1,588</b>
Marquette University	223	59	0	53	0	0	30	16	65
Medical College of Wisconsin	102	0	0	0	0	0	102	0	0
Milwaukee School of Engineering	0	0	0	0	0	0	0	0	0
University of Wisconsin - Eau Claire	20	0	0	4	0	0	7	9	0

See explanatory information, if any, and SOURCE(S) at end of table.

**Table E-2. Graduate science students in all institutions,  
by geographic division, State, institution,  
and major field of science: 1991**

Page 5 of 11

Division, State, and Institution	Total, sciences	Physical sciences	Earth, atmos., & ocean sciences	Mathe- matical sciences	Computer sciences	Agricul- tural sciences	Bio- logical sciences	Psychol- ogy	Social sciences
<b>Wisconsin, continued</b>									
University of Wisconsin - Green Bay	45	0	43	2	0	0	0	0	0
University of Wisconsin - La Crosse	55	0	0	0	0	0	32	23	0
University of Wisconsin - Madison	4,031	521	322	321	219	314	939	373	1,022
University of Wisconsin - Milwaukee	1,209	120	36	82	93	0	82	414	382
University of Wisconsin - Oshkosh	179	6	0	8	0	0	15	41	109
University of Wisconsin - Platteville	14	0	0	0	0	14	0	0	0
University of Wisconsin - River Falls	55	0	0	0	0	0	0	45	10
University of Wisconsin - Stevens Point	48	0	48	0	0	0	0	0	0
University of Wisconsin - Stout	55	0	0	0	0	0	24	31	0
University of Wisconsin - Whitewater	48	0	0	0	0	0	6	42	0
<b>West North Central</b>	<b>20,023</b>	<b>2,205</b>	<b>559</b>	<b>1,583</b>	<b>1,404</b>	<b>1,612</b>	<b>4,233</b>	<b>3,643</b>	<b>4,784</b>
<b>Iowa</b>	<b>3,340</b>	<b>521</b>	<b>79</b>	<b>457</b>	<b>262</b>	<b>303</b>	<b>859</b>	<b>303</b>	<b>856</b>
Drake University	109	6	0	1	0	0	15	8	79
Iowa State University of Sci & Tech	1,962	298	30	199	86	303	513	172	361
Loras College	23	0	0	0	0	0	0	23	0
Maharishi International University	78	12	0	4	17	0	25	20	0
Teikyo Marycrest College	38	0	0	0	38	0	0	0	0
Univ. of Osteopathic Med & Health Sci	0	0	0	0	0	0	0	0	0
University of Iowa	1,353	200	48	233	121	0	297	69	385
University of Northern Iowa	77	5	1	20	0	0	9	11	31
<b>Kansas</b>	<b>3,500</b>	<b>347</b>	<b>78</b>	<b>230</b>	<b>184</b>	<b>302</b>	<b>707</b>	<b>784</b>	<b>868</b>
Emporia State University - Kansas	129	15	0	6	0	0	24	84	0
Fort Hays State University	95	13	11	2	0	0	26	31	12
Kansas State University	1,204	115	9	105	58	302	280	120	216
Pittsburg State University	294	25	0	9	0	0	35	204	21
University of Kansas	1,418	145	53	59	76	0	324	277	484
Washburn University of Topeka	32	0	0	0	0	0	0	32	0
Wichita State University	328	34	6	49	50	0	18	36	135
<b>Minnesota</b>	<b>5,367</b>	<b>475</b>	<b>104</b>	<b>321</b>	<b>325</b>	<b>308</b>	<b>1,064</b>	<b>1,597</b>	<b>1,173</b>
Bemidji State University	20	0	6	6	2	0	6	0	0
Mankato State University	319	24	19	59	25	0	24	35	133
Mayo Graduate School	104	0	0	0	0	0	104	0	0
Moorhead State University	144	0	0	0	59	0	0	85	0
St Mary's College of Minnesota	792	0	0	0	0	0	0	792	0
St. Cloud State University	34	0	0	1	0	0	13	13	7
University of Minnesota	3,954	451	79	255	239	308	917	672	1,033
<b>Missouri</b>	<b>4,245</b>	<b>534</b>	<b>165</b>	<b>278</b>	<b>391</b>	<b>227</b>	<b>929</b>	<b>657</b>	<b>1,064</b>
Central Missouri State University	274	0	0	19	0	8	4	105	138
Kirkville College of Osteopathic Med	0	0	0	0	0	0	0	0	0
Lincoln University	32	0	0	0	0	0	0	0	32
Northeast Missouri State University	17	0	0	6	0	0	11	0	0
Northwest Missouri State University	44	0	0	0	0	9	5	30	0
Southeast Missouri State University	43	0	0	0	0	0	43	0	0
Southwest Missouri State University	133	0	26	18	0	0	32	0	57
St. Louis University	385	16	28	16	0	0	147	92	86
Univ of Health Sciences (Kansas City)	0	0	0	0	0	0	0	0	0
University of Missouri - Columbia	1,285	138	41	92	0	210	256	120	428
University of Missouri - Kansas City	552	66	16	22	150	0	75	143	80
University of Missouri - Rolla	327	104	26	30	167	0	0	0	0
University of Missouri - St Louis	281	67	0	19	0	0	35	87	73
Washington University	872	143	28	56	74	0	321	80	170
<b>Nebraska</b>	<b>1,991</b>	<b>163</b>	<b>72</b>	<b>220</b>	<b>91</b>	<b>290</b>	<b>348</b>	<b>215</b>	<b>592</b>
Creighton University	71	6	5	9	20	0	31	0	0
Kearney State College	33	0	0	2	0	0	7	24	0
University of Nebraska - Lincoln	1,236	157	67	70	71	290	199	92	290
University of Nebraska - Omaha	591	0	0	139	0	0	51	99	302

See explanatory information, if any, and SOURCE(S) at end of table.

**Table E-2. Graduate science students in all institutions,  
by geographic division, State, institution,  
and major field of science: 1991**

Page 6 of 11

Division, State, and institution	Total, sciences	Physical sciences	Earth, atmos., & ocean sciences	Mathe- matical sciences	Computer sciences	Agricul- tural sciences	Bio- logical sciences	Psychol- ogy	Social sciences
Nebraska, continued									
University of Nebraska Medical Center	60	0	0	0	0	0	60	0	0
North Dakota	709	100	24	45	112	113	190	47	78
North Dakota State University	480	69	0	28	89	113	131	12	38
University of North Dakota	229	31	24	17	23	0	59	35	40
South Dakota	571	65	37	32	39	69	136	40	153
South Dakota School of Mines and Tech	78	17	37	0	24	0	0	0	0
South Dakota State University	291	37	0	16	0	69	93	0	76
University of South Dakota	202	11	0	16	15	0	43	40	77
South Atlantic	45,141	4,297	2,243	3,230	5,074	1,618	8,414	6,690	13,575
Delaware	1,003	165	101	128	102	20	125	64	298
Delaware State College	23	12	0	0	0	0	11	0	0
University of Delaware	980	153	101	128	102	20	114	64	298
District of Columbia	6,057	360	38	285	724	0	651	477	3,522
Catholic University of America	425	94	0	5	0	0	32	95	199
Gallaudet University	0	0	0	0	0	0	0	0	0
George Washington University	2,638	38	36	205	521	0	258	148	1,432
Georgetown University	633	63	0	0	0	0	212	0	358
Howard University	655	75	2	22	39	0	130	91	296
The American University	1,656	90	0	53	164	0	19	109	1,221
University of the District of Columbia	50	0	0	0	0	0	0	34	16
Florida	8,579	831	602	561	1,112	382	1,142	1,664	2,285
Florida A & M University	90	2	0	0	0	16	2	18	52
Florida Atlantic University	475	49	0	20	101	0	32	48	225
Florida Institute of Technology	709	89	68	51	276	0	52	126	47
Florida International University	578	29	14	2	92	0	87	69	285
Florida State University	1,203	185	146	94	125	0	146	119	388
Jacksonville University	26	0	0	12	14	0	0	0	0
Nova University	820	0	43	0	72	0	0	669	36
University of Central Florida	612	59	0	66	139	0	40	71	237
University of Florida	1,972	275	34	143	165	366	401	155	433
University of Miami	837	68	159	85	0	0	224	112	189
University of South Florida	856	75	138	58	0	0	136	135	314
University of West Florida	401	0	0	30	128	0	22	142	79
Georgia	5,160	583	125	342	475	209	1,039	885	1,502
Augusta College	49	0	0	0	0	0	0	49	0
Clark Atlanta University	282	40	0	12	67	0	31	0	132
Emory University	549	139	0	37	0	0	160	89	124
Fort Valley State College	73	0	0	0	0	0	0	73	0
Georgia College	215	0	0	0	44	0	5	50	116
Georgia Institute of Technology	842	227	69	66	239	0	42	73	126
Georgia Southern University	135	0	0	5	0	0	22	6	102
Georgia State University	950	50	14	138	11	0	146	183	408
Institute of Paper Science & Technology	0	0	0	0	0	0	0	0	0
Medical College of Georgia	82	0	0	0	0	0	82	0	0
Mercer University	30	0	0	0	30	0	0	0	0
Morehouse School of Medicine	0	0	0	0	0	0	0	0	0
University of Georgia	1,585	127	42	84	84	209	548	170	321
Valdosta State College	247	0	0	0	0	0	0	79	168
West Georgia College	121	0	0	0	0	0	3	113	5
Maryland	6,554	553	277	531	593	147	1,596	1,281	1,576
Coppin State College	31	0	0	0	0	0	0	0	31
Frostburg State University	64	0	0	0	0	18	7	39	0
Hood College	391	0	0	127	0	0	201	63	0
Johns Hopkins University	1,029	88	28	71	42	0	488	43	269
Loyola College	477	0	0	0	0	0	0	477	0
Morgan State University	57	0	0	7	0	0	0	0	50
Towson State University	338	0	0	0	0	0	20	271	47
Uniformed Serv Univ of the Hlth Science	88	0	0	0	0	0	62	26	0
University of Baltimore	272	0	0	0	0	0	0	73	199
University of Maryland - Balt Prof Sch	355	0	6	0	0	0	349	0	0
University of Maryland - Baltimore Cnty	803	62	1	95	255	0	125	114	151
University of Maryland - College Park	2,498	403	201	231	234	129	343	128	829
University of Maryland Eastern Shore	104	0	41	0	62	0	1	0	0
Washington College	47	0	0	0	0	0	0	47	0
North Carolina	6,809	762	444	551	422	368	1,958	738	1,566
Appalachian State University	242	19	0	29	0	0	34	82	78
Duke University	1,074	164	36	37	48	35	365	63	328
East Carolina University	259	30	18	17	0	0	75	93	28
North Carolina A & T State University	70	17	0	0	0	0	10	0	43

See explanatory information, if any, and SOURCE(S) at end of table.

**Table E-2. Graduate science students in all institutions,  
by geographic division, State, institution,  
and major field of science: 1991**

Page 7 of 11

Division, State, and institution	Total, sciences	Physical sciences	Earth, atmos., & ocean sciences	Mathe- matical sciences	Computer sciences	Agricul- tural sciences	Bio- logical sciences	Psychol- ogy	Social sciences
<b>North Carolina, continued</b>									
North Carolina Central University	76	6	0	10	0	0	16	38	6
North Carolina State Univ at Raleigh	1,812	155	86	260	127	333	438	108	305
Univ of North Carolina at Chapel Hill	2,139	272	269	110	107	0	774	112	495
Univ of North Carolina at Charlotte	430	16	0	27	137	0	28	57	165
Univ of North Carolina at Greensboro	303	23	0	13	0	0	55	135	77
University of North Carolina/Wilmington	74	5	37	11	0	0	21	0	0
Wake Forest University	229	44	0	13	3	0	132	21	16
Western Carolina University	101	11	0	24	0	0	10	29	27
<b>South Carolina</b>	2,356	329	162	203	269	137	593	193	470
Clemson University	927	146	0	107	139	137	221	25	152
College of Charleston	67	0	31	0	0	0	0	0	36
Furman University	7	7	0	0	0	0	0	0	0
Medical University of South Carolina	154	0	0	0	0	0	154	0	0
University of South Carolina	1,136	176	131	92	130	0	176	149	282
Winthrop College	65	0	0	4	0	0	42	19	0
<b>Virginia</b>	7,292	620	379	488	1,294	266	1,090	1,136	2,019
College of William and Mary	355	62	114	12	69	0	17	19	62
Eastern Virginia Medical School	118	0	0	0	0	0	58	60	0
George Mason University	1,786	23	0	116	817	0	121	199	510
Hampton University	64	35	0	12	0	0	17	0	0
Hollins College	5	0	0	0	0	0	0	5	0
Institute of Textile Technology	0	0	0	0	0	0	0	0	0
James Madison University	108	0	0	1	24	0	17	38	28
Old Dominion University	674	68	84	38	94	0	102	63	225
Radford University	169	0	0	0	0	0	0	146	23
University of Richmond	28	0	0	0	0	0	7	9	12
University of Virginia	1,242	193	85	92	114	0	217	96	445
Virginia Commonwealth University	1,128	62	0	42	75	0	296	271	382
Virginia Polytechnic Inst and State Uni	1,551	166	93	157	101	260	232	208	332
Virginia State University	64	9	3	18	0	6	6	22	0
<b>West Virginia</b>	1,331	94	115	141	83	89	220	252	337
Marshall University	204	28	0	23	0	0	69	31	53
Univ of West Virginia Coll of Grad Stds	299	0	68	0	83	0	0	126	22
University of Charleston	1	0	0	0	0	0	1	0	0
West Virginia Institute of Technology	0	0	0	0	0	0	0	0	0
West Virginia Sch of Osteopathic Med	0	0	0	0	0	0	0	0	0
West Virginia University	827	66	47	118	0	89	150	95	262
<b>East South Central</b>	12,797	1,381	325	965	1,223	754	2,720	2,423	3,006
<b>Alabama</b>	3,606	414	66	262	538	287	641	513	685
Alabama A & M University	254	43	0	0	109	0	74	0	28
Alabama State University	10	0	0	6	0	0	4	0	0
Auburn University	1,142	119	19	87	54	244	178	152	289
Jacksonville State University	151	0	0	3	0	0	18	41	89
The University of Alabama	574	82	34	44	40	0	56	95	223
The University of Alabama at Birmingham	591	60	0	22	88	0	376	43	0
The University of Alabama in Huntsville	382	103	10	86	153	0	22	8	0
Troy State University in Montgomery	169	0	0	0	24	0	0	142	3
Tuskegee University	62	7	0	0	0	43	12	0	0
University of Montevallo	0	0	0	0	0	0	0	0	0
University of South Alabama	271	0	2	14	70	0	99	32	53
<b>Kentucky</b>	2,692	273	66	282	113	132	573	500	753
Eastern Kentucky University	171	22	3	17	0	0	28	57	44
Morehead State University	69	0	0	0	0	0	10	33	26
Murray State University	193	21	20	4	0	23	23	34	68
Spalding University	107	0	0	0	0	0	0	107	0
University of Kentucky	1,327	140	43	110	91	96	302	138	407
University of Louisville	617	74	0	145	0	0	187	85	126
Western Kentucky University	208	16	0	6	22	13	23	46	82
<b>Mississippi</b>	2,071	263	57	99	261	259	343	292	497
Jackson State University	269	30	0	17	83	0	28	0	111
Mississippi State University	802	58	19	39	72	259	119	78	158
Mississippi University for Women	0	0	0	0	0	0	0	0	0
University of Mississippi	558	69	23	31	47	0	127	113	148
University of Southern Mississippi	442	106	15	12	59	0	69	101	80
<b>Tennessee</b>	4,428	431	136	322	311	76	963	1,118	1,071
Austin Peay State University	37	0	0	0	0	0	9	28	0
East Tennessee State University	317	10	52	13	62	0	66	33	81
Fisk University	29	14	0	0	0	0	6	6	3

See explanatory information, if any, and SOURCE(S) at end of table.



**Table E-2. Graduate science students in all institutions,  
by geographic division, State, institution,  
and major field of science: 1991**

Page 8 of 11

Division, State, and institution	Total, sciences	Physical sciences	Earth, atmos., & ocean sciences	Mathe- matical sciences	Computer sciences	Agricul- tural sciences	Bio- logical sciences	Psychol- ogy	Social sciences
Tennessee, continued									
Meharry Medical College	54	0	0	0	0	0	54	0	0
Memphis State University	719	45	30	106	0	0	86	158	294
Middle Tennessee State University	529	26	0	32	24	0	39	364	44
Tennessee State University	185	13	0	14	0	18	10	46	84
Tennessee Technological University	153	11	0	10	0	0	55	77	0
University of Tennessee at Chattanooga	184	0	0	0	48	0	0	96	40
University of Tennessee at Knoxville	1,412	210	48	116	137	58	328	170	345
University of Tennessee, Memphis	112	0	0	0	0	0	112	0	0
Vanderbilt University	697	102	6	31	40	0	198	140	180
<b>West South Central</b>	<b>27,198</b>	<b>3,201</b>	<b>1,678</b>	<b>1,700</b>	<b>3,728</b>	<b>1,695</b>	<b>5,065</b>	<b>4,615</b>	<b>5,516</b>
Arkansas									
Arkansas State University	254	8	0	11	20	0	29	114	72
University of Arkansas	600	94	17	44	15	160	144	42	84
University of Arkansas - Med Sci Campus	61	0	0	0	0	0	61	0	0
University of Arkansas at Little Rock	152	12	0	15	19	0	0	13	93
University of Central Arkansas	158	0	0	0	0	0	26	120	12
Louisiana									
Grambling State University	9	0	0	0	0	0	9	0	0
Louisiana State University System	1,970	220	162	119	150	165	456	161	537
Louisiana Tech University	74	13	0	7	27	0	27	0	0
Loyola University in New Orleans	2	0	0	0	0	0	2	0	0
McNeese State University	126	16	0	30	0	0	31	49	0
Nicholls State University	40	0	0	8	0	0	0	32	0
Northeast Louisiana University	140	21	11	0	0	0	33	75	0
Northwest State University	44	0	0	0	0	0	0	44	0
Southeastern Louisiana University	32	0	0	0	0	0	14	18	0
Southern University A & M College	212	15	16	11	69	0	4	60	37
Tulane University of Louisiana	597	64	15	43	40	0	145	70	220
University of Southwestern Louisiana	453	15	27	60	258	0	41	39	13
Xavier University	0	0	0	0	0	0	0	0	0
<b>Oklahoma</b>	<b>2,629</b>	<b>266</b>	<b>228</b>	<b>161</b>	<b>151</b>	<b>145</b>	<b>508</b>	<b>459</b>	<b>711</b>
East Central University	8	0	0	0	0	0	0	8	0
Northeastern State University	103	0	0	0	0	0	0	79	24
Oklahoma State University	1,186	97	43	85	114	145	248	230	224
Southwestern Oklahoma State University	15	0	0	0	0	0	0	15	0
University of Oklahoma	1,143	169	167	68	0	0	246	40	453
University of Tulsa	174	0	18	8	37	0	14	87	10
Texas									
Abilene Christian University	76	2	0	0	0	0	5	57	12
Angelo State University	123	0	0	2	0	16	15	65	25
Baylor College of Dentistry	6	0	0	0	0	0	6	0	0
Baylor College of Medicine	246	0	0	0	0	0	246	0	0
Baylor University	344	49	50	10	22	0	27	137	49
Corpus Christi State University	134	0	0	0	58	13	38	25	0
East Texas State University	346	30	13	26	139	19	16	80	23
Incarinate Word College	74	0	0	0	0	0	51	0	23
Lamar University	216	17	0	12	124	0	20	28	15
Midwestern State University	142	0	0	0	40	0	17	22	63
Prairie View A & M University	123	10	0	26	0	39	7	0	41
Rice University	582	178	81	77	55	0	57	48	86
Sam Houston State University	362	34	0	23	53	40	14	41	157
Southern Methodist University	310	3	29	47	69	0	18	39	105
Southwest Texas State University	600	29	38	28	133	0	76	57	239
St Mary's University of San Antonio	0	0	0	0	0	0	0	0	0
Stephen F. Austin State University	201	9	17	25	7	61	40	42	0
Sul Ross State University	43	0	6	0	0	5	14	0	18
Tarleton State University	47	0	0	3	0	16	14	0	14
Texas A & I University	171	7	13	11	17	51	13	30	29
Texas A & M University	3,363	449	312	148	270	817	466	347	554
Texas Christian University	124	36	22	0	18	0	6	33	9
Texas College of Osteopathic Medicine	0	0	0	0	0	0	0	0	0
Texas Southern University	240	25	0	32	0	0	37	79	67
Texas Tech University	1,009	120	59	85	69	111	138	267	160
Texas Woman's University	510	7	0	49	0	0	249	177	28
The University of Texas - Pan American	12	0	0	0	0	0	12	0	0

See explanatory information, if any, and SOURCE(S) at end of table.

**Table E-2. Graduate science students in all institutions,  
by geographic division, State, institution,  
and major field of science: 1991**

Page 9 of 11

Division, State, and Institution	Total sciences	Physical sciences	Earth, atmos., & ocean sciences	Mathematical sciences	Computer sciences	Agricultural sciences	Biological sciences	Psychology	Social sciences
<b>Texas, continued</b>									
Trinity University	20	0	0	0	0	0	0	0	20
Univ of Texas Hlth Sci Ctr San Antonio	133	0	0	0	0	0	133	0	0
Univ of Texas Hlth Sci Ctr at Houston	428	0	0	0	0	0	399	16	13
Univ of Texas MD Anderson Cancer Center	0	0	0	0	0	0	0	0	0
Univ of Texas Med Branch at Galveston	128	0	0	0	0	0	128	0	0
Univ of Texas SW Medical Ctr at Dallas	259	0	0	0	0	0	207	52	0
Univ of Texas at Arlington	918	83	28	71	369	0	46	39	282
Univ of Texas at Austin	2,538	654	171	172	228	0	349	151	813
Univ of Texas at Dallas	788	146	91	56	272	0	53	48	120
Univ of Texas at El Paso	363	32	58	20	40	0	46	34	133
University of Central Texas	197	0	0	0	50	0	0	107	40
University of Houston - Victoria	27	0	0	0	0	0	0	27	0
University of Houston at Clear Lake Ctr	1,097	133	0	35	378	0	39	512	0
University of Houston-University Park	1,724	244	132	114	233	0	240	430	331
University of North Texas	1,009	136	0	74	208	0	182	207	202
University of Texas at San Antonio	225	11	62	33	53	0	66	0	0
University of Texas at Tyler	187	0	0	4	74	0	6	65	38
University of Texas of the Permian Basin	56	0	18	0	0	0	11	27	0
West Texas State University	146	13	2	8	0	37	28	30	28
<b>Mountain</b>	<b>18,968</b>	<b>2,642</b>	<b>1,993</b>	<b>1,285</b>	<b>2,045</b>	<b>1,206</b>	<b>2,600</b>	<b>2,152</b>	<b>5,045</b>
<b>Arizona</b>									
Arizona State University	1,686	205	57	83	354	48	155	99	885
Northern Arizona University	783	23	64	23	0	38	66	377	192
University of Arizona	2,388	453	421	181	231	62	442	113	485
<b>Colorado</b>									
Colorado School of Mines	553	79	352	51	0	0	0	0	71
Colorado State University	1,353	146	154	96	65	321	274	121	176
National Technological University	150	7	0	0	143	0	0	0	0
University of Colorado	2,542	444	181	137	223	0	350	214	993
University of Denver	936	49	0	30	307	0	18	222	310
University of Northern Colorado	182	14	7	67	0	0	27	61	6
<b>Idaho</b>									
Idaho State University	233	19	10	22	0	0	70	32	74
University of Idaho	728	76	68	32	75	255	75	33	114
<b>Montana</b>									
Montana College Mineral Sci & Technolog	9	3	0	0	0	0	0	0	6
Montana State University	393	113	29	57	32	10	137	0	15
University of Montana	520	18	136	36	32	58	69	52	119
<b>Nevada</b>									
University of Nevada at Las Vegas	320	24	35	17	35	0	31	25	153
University of Nevada at Reno	615	87	120	28	40	52	76	82	130
<b>New Mexico</b>									
Eastern New Mexico University	92	9	0	14	0	0	7	45	17
New Mexico Highlands University	54	10	0	0	0	0	12	15	17
New Mexico Institute of Mining and Techn	184	45	85	17	29	0	8	0	0
New Mexico State University	656	140	32	43	66	88	65	52	170
University of New Mexico	1,143	179	55	91	101	0	163	80	474
<b>Utah</b>									
Brigham Young University	738	90	13	60	74	14	89	246	152
University of Utah	1,092	254	79	77	96	0	205	67	314
Utah State University	871	85	17	39	107	183	140	158	142
<b>Wyoming</b>									
University of Wyoming	747	70	72	84	35	77	121	58	230
<b>Pacific</b>									
<b>Alaska</b>	<b>451</b>	<b>43</b>	<b>91</b>	<b>11</b>	<b>15</b>	<b>52</b>	<b>113</b>	<b>60</b>	<b>66</b>
University of Alaska Southeast	26	0	0	0	0	0	0	0	26
University of Alaska at Anchorage	54	0	0	0	0	0	10	44	0
University of Alaska at Fairbanks	371	43	91	11	15	52	103	16	40
<b>California</b>									
Azusa Pacific University	174	0	0	0	174	0	0	0	0
Biola University	188	0	0	0	0	0	0	188	0
Calif Poly State Univ at San Luis Obisp	279	3	0	22	96	102	25	0	31

See explanatory information, if any, and SOURCE(S) at end of table.

**Table E-2. Graduate science students in all institutions,  
by geographic division, State, institution,  
and major field of science: 1991**

Page 10 of 11

Division, State, and institution	Total, sciences	Physical sciences	Earth, atmos., & ocean sciences	Mathe- matical sciences	Computer sciences	Agricul- tural sciences	Bio- logical sciences	Psychol- ogy	Social sciences
California, continued									
Calif Sch of Prof Psych - Fresno	366	0	0	0	0	0	0	366	0
Calif Sch of Prof Psych - Los Angeles	534	0	0	0	0	0	0	534	0
Calif Sch of Prof Psych - San Diego	617	0	0	0	0	0	0	617	0
Calif Sch of Prof Psych-Berkeley/Alameda	519	0	0	0	0	0	0	519	0
Calif State Polytechnic Univ at Pomona	291	20	0	28	51	95	37	0	60
Calif State Univ at Dominguez Hills	396	0	0	0	0	0	29	203	164
Calif State Univ at Fullerton	806	19	74	60	229	0	46	54	324
Calif State Univ at Hayward	840	19	19	57	65	0	23	328	329
Calif State Univ at Long Beach	1,226	80	23	45	202	0	127	150	599
Calif State Univ at Los Angeles	663	43	41	53	0	0	52	207	267
Calif State Univ at San Bernardino	189	0	0	10	0	0	18	72	89
Calif State Univ of Stanislaus	153	0	0	0	0	0	16	58	79
Calif State University at Chico	434	0	14	0	90	19	43	102	166
Calif State University at Fresno	668	35	7	32	30	79	38	355	92
Calif State University at Northridge	701	69	18	58	159	0	135	131	131
Calif State University at Sacramento	532	22	0	26	103	0	31	95	255
California Institute of Integral Studie	362	0	0	0	0	0	0	362	0
California Institute of Technology	698	405	70	51	64	0	84	0	24
California State Univ - Bakersfield	140	0	13	0	0	0	0	79	48
Chapman University	152	0	0	0	0	0	37	115	0
Charles R. Drew Univ of Medicine & Sci	0	0	0	0	0	0	0	0	0
Claremont Univ Center & Graduate School	552	0	0	46	126	0	12	108	260
Dominican College of San Rafael	109	0	0	0	0	0	0	51	58
Fuller Theological Seminary	343	0	0	0	0	0	0	343	0
Golden Gate University	192	0	0	0	0	0	0	0	192
Harvey Mudd College	0	0	0	0	0	0	0	0	0
Humboldt State University	271	0	0	0	0	93	41	86	51
John F Kennedy University	825	0	0	0	0	0	0	825	0
Loma Linda University	105	0	8	0	0	0	97	0	0
Loyola Marymount University	150	0	16	0	34	0	0	100	0
National University	567	0	0	0	44	0	0	464	59
Occidental College	1	0	0	0	0	0	0	1	0
Pacific Grad School of Prof Psych	341	0	0	0	0	0	0	341	0
Pacific States University	2	0	0	0	2	0	0	0	0
Pepperdine University	935	0	0	0	0	0	0	935	0
Rand Graduate School of Policy Studies	60	0	0	0	0	0	0	0	60
San Diego State University	1,243	106	36	83	126	0	312	167	413
San Francisco State University	905	78	9	33	99	0	153	162	371
San Jose State University	1,041	129	70	47	199	0	95	134	367
Santa Clara University	584	0	0	26	445	0	0	113	0
Sonoma State University	156	0	0	0	0	0	27	86	41
Stanford University	2,007	341	149	214	407	0	358	45	493
The Fielding Institute	478	0	0	0	0	0	0	478	0
The Wright Institute	199	0	0	0	0	0	0	199	0
US International University	492	0	0	0	0	0	0	492	0
US Naval Postgraduate School	541	75	92	146	228	0	0	0	0
University of Calif at Berkeley	2,946	586	94	317	170	154	602	120	903
University of Calif at Davis	1,963	214	68	94	81	251	859	51	345
University of Calif at Irvine	947	221	0	49	114	0	234	41	288
University of Calif at Los Angeles	2,428	437	132	221	211	0	607	181	639
University of Calif at Riverside	733	106	37	77	19	26	232	61	175
University of Calif at San Diego	1,392	338	179	89	108	0	296	86	296
University of Calif at San Francisco	275	0	0	0	1	0	200	17	57
University of Calif at Santa Barbara	1,008	209	45	92	85	0	149	48	360
University of Calif at Santa Cruz	584	150	85	38	35	0	102	57	117
University of La Verne	125	0	0	0	0	0	0	0	125
University of Redlands	0	0	0	0	0	0	0	0	0
University of San Diego	42	0	8	0	0	0	0	0	34
University of San Francisco	63	12	0	0	25	0	6	0	20
University of Southern California	2,450	170	81	120	380	0	281	110	1,308

See explanatory information, if any, and SOURCE(S) at end of table.

200

**Table E-2. Graduate science students in all institutions,  
by geographic division, State, institution,  
and major field of science: 1991**

Page 11 of 11

Division, State, and institution	Total, sciences	Physical sciences	Earth, atmos., & ocean sciences	Mathe- matical sciences	Computer sciences	Agricul- tural sciences	Bio- logical sciences	Psychol- ogy	Social sciences
California, continued									
University of the Pacific	54	22	0	0	0	0	13	15	4
West Coast University	46	0	0	0	46	0	0	0	0
Hawaii	1,507	115	149	25	69	94	304	99	652
University of Hawaii at Manoa	1,507	115	149	25	69	94	304	99	652
Oregon	3,095	462	253	271	295	369	562	107	776
Oregon Grad Inst of Science & Technolog	142	29	42	0	71	0	0	0	0
Oregon Health Sciences University	118	0	0	0	0	0	105	13	0
Oregon State University	1,262	152	96	113	110	369	328	0	94
Pacific University	0	0	0	0	0	0	0	0	0
Portland State University	693	29	59	76	48	0	27	34	420
Southern Oregon State College	50	0	18	5	0	0	1	0	26
University of Oregon	830	252	38	77	66	0	101	60	236
University of Portland	0	0	0	0	0	0	0	0	0
Washington	4,534	466	457	259	254	490	967	472	1,169
Central Washington University	132	0	0	4	0	11	26	91	0
Eastern Washington University	257	0	12	22	35	0	27	88	73
Gonzaga University	0	0	0	0	0	0	0	0	0
Pacific Lutheran University	57	0	0	0	14	0	0	0	43
Saint Martin's College	0	0	0	0	0	0	0	0	0
Seattle University	125	0	0	0	0	0	0	39	86
University of Washington	2,738	360	303	176	149	349	625	148	628
Walla Walla College	5	0	0	0	0	0	5	0	0
Washington State University	931	102	68	37	41	130	269	54	280
Western Washington University	239	4	74	20	15	0	15	52	59
Whitworth College	0	0	0	0	0	0	0	0	0
Outlying Areas	1,852	137	59	65	0	69	260	650	612
Guam	12	0	0	0	0	0	6	0	6
University of Guam	12	0	0	0	0	0	6	0	6
Puerto Rico	1,840	137	59	65	0	69	254	650	606
Caribbean Center for Advanced Studies	386	0	0	0	0	0	0	386	0
Catholic University of Puerto Rico	0	0	0	0	0	0	0	0	0
Ponce School of Medicine	15	0	0	0	0	0	15	0	0
University of Puerto Rico	271	40	59	21	0	69	68	0	14
University of Puerto Rico - Rio Piedras	1,055	97	0	44	0	0	76	264	574
University of Puerto Rico Med Sci Campu	113	0	0	0	0	0	95	0	18

NOTE: Includes medical schools

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table E-3. Graduate engineering students in all institutions,  
by geographic division, State, institution,  
and major field of engineering: 1991**

Page 1 of 11

Division, State, and institution	Total, engi- neering	Chemical	Civil	Elec- trical	Indus- trial	Mechan- ical	Metallur- gical/ materials	All other engi- neering
Total, all institutions	114,407	7,127	17,265	35,272	13,333	17,820	5,149	18,441
New England	9,251	710	1,327	2,928	813	1,441	389	1,643
Connecticut	1,271	41	147	319	28	383	137	216
Central Connecticut State University	0	0	0	0	0	0	0	0
Connecticut College	0	0	0	0	0	0	0	0
Quinnipiac College	0	0	0	0	0	0	0	0
Southern Connecticut State University	0	0	0	0	0	0	0	0
St. Joseph College	0	0	0	0	0	0	0	0
The Hartford Graduate Center	443	0	0	153	0	226	31	33
Trinity College	0	0	0	0	0	0	0	0
University of Bridgeport	16	0	0	7	4	5	0	0
University of Connecticut	492	41	82	136	0	127	106	0
University of Hartford	9	0	0	0	0	0	0	9
University of New Haven	137	0	65	23	24	25	0	0
Wesleyan University	0	0	0	0	0	0	0	0
Western Connecticut State University	0	0	0	0	0	0	0	0
Yale University	174	0	0	0	0	0	0	174
Maine	157	22	84	33	0	13	0	5
University of Maine	157	22	84	33	0	13	0	5
University of New England	0	0	0	0	0	0	0	0
Massachusetts	6,975	615	1,001	2,360	761	921	232	1,085
American International College	0	0	0	0	0	0	0	0
Anna Maria College	0	0	0	0	0	0	0	0
Assumption College	0	0	0	0	0	0	0	0
Boston College	0	0	0	0	0	0	0	0
Boston University	586	0	0	291	61	0	0	234
Brandeis University	0	0	0	0	0	0	0	0
Bridgewater State College	0	0	0	0	0	0	0	0
Clark University	0	0	0	0	0	0	0	0
Emerson College	0	0	0	0	0	0	0	0
Framingham State College	0	0	0	0	0	0	0	0
Harvard University	197	0	27	0	0	0	0	170
MGH Institute of Health Professions	0	0	0	0	0	0	0	0
Mass College of Pharmacy/Allied Health	0	0	0	0	0	0	0	0
Massachusetts Institute of Technology	2,272	203	471	493	0	422	188	495
Mount Holyoke College	0	0	0	0	0	0	0	0
Northeastern University	1,155	27	172	580	236	140	0	0
Salem State College	0	0	0	0	0	0	0	0
Smith College	0	0	0	0	0	0	0	0
Tufts University	316	49	97	92	0	53	0	25
University of Massachusetts	667	65	71	290	93	119	0	29
University of Massachusetts Dartmouth	67	0	0	54	0	0	0	13
University of Massachusetts Lowell	958	250	74	332	210	63	0	29
Western New England College	148	0	0	19	119	10	0	0
Williams College	0	0	0	0	0	0	0	0
Woods Hole Oceanographic Institution	0	0	0	0	0	0	0	0
Worcester Polytechnic Institute	609	21	89	209	42	114	44	90
Worcester State College	0	0	0	0	0	0	0	0
New Hampshire	287	6	29	49	0	42	0	161
Dartmouth College	113	0	0	0	0	0	0	113
Rivier College	0	0	0	0	0	0	0	0
University of New Hampshire	174	6	29	49	0	42	0	48
Rhode Island	447	26	51	123	24	58	0	165
Brown University	117	0	0	0	0	0	0	117
Providence College	0	0	0	0	0	0	0	0
Rhode Island College	0	0	0	0	0	0	0	0
University of Rhode Island	330	26	51	123	24	58	0	48
Vermont	114	0	15	44	0	24	20	11
Goddard College	0	0	0	0	0	0	0	0
Marlboro College	0	0	0	0	0	0	0	0
Middlebury College	0	0	0	0	0	0	0	0
University of Vermont & St Agric College	114	0	15	44	0	24	20	11
Middle Atlantic	18,141	1,247	2,878	5,826	1,668	2,903	1,120	2,499
New Jersey	3,092	253	644	1,008	240	510	213	224
Drew University	0	0	0	0	0	0	0	0
Fairleigh Dickinson University	92	0	0	76	0	0	0	16
Kean College of New Jersey	0	0	0	0	0	0	0	0
Monmouth College(NJ)	163	0	0	163	0	0	0	0
Montclair State College	0	0	0	0	0	0	0	0
New Jersey Institute of Technology	1,086	52	330	264	194	155	0	91

See explanatory information, if any, and SOURCE(S) at end of table.



**Table E-3. Graduate engineering students in all institutions,  
by geographic division, State, institution,  
and major field of engineering: 1991**

Page 2 of 11

Division, State, and Institution	Total, engi- neering	Chemical	Civil	Elec- trical	Indus- trial	Mechan- ical	Metallur- gical/ materials	All other engi- neering
<b>New Jersey, continued</b>								
Princeton University	377	60	121	105	0	91	0	0
Rutgers the State University	795	58	86	225	46	105	158	117
Seton Hall University	0	0	0	0	0	0	0	0
Stevens Institute of Technology	579	83	107	175	0	159	55	0
Trenton State College	0	0	0	0	0	0	0	0
Univ of Med and Dent of New Jersey	0	0	0	0	0	0	0	0
William Paterson College	0	0	0	0	0	0	0	0
<b>New York</b>	<b>8,830</b>	<b>488</b>	<b>1,623</b>	<b>3,070</b>	<b>648</b>	<b>1,401</b>	<b>499</b>	<b>1,101</b>
Adelphi University	0	0	0	0	0	0	0	0
Albany Medical College Grad Studies Pro	0	0	0	0	0	0	0	0
Alfred University	80	0	0	2	15	1	62	0
CUNY Bernard Baruch College	0	0	0	0	0	0	0	0
CUNY Brooklyn College	0	0	0	0	0	0	0	0
CUNY City College	591	29	216	213	0	133	0	0
CUNY College of Staten Island St George	0	0	0	0	0	0	0	0
CUNY Graduate School and Univ Center	138	0	0	0	0	0	0	138
CUNY Herbert H. Lehman College	0	0	0	0	0	0	0	0
CUNY Hunter College	0	0	0	0	0	0	0	0
CUNY John Jay College of Crim Justice	0	0	0	0	0	0	0	0
CUNY Mt. Sinai Sch of Medicine	0	0	0	0	0	0	0	0
CUNY Queens College	0	0	0	0	0	0	0	0
Clarkson University	199	50	41	48	0	60	0	0
College of New Rochelle	0	0	0	0	0	0	0	0
College of St Rose	0	0	0	0	0	0	0	0
Columbia University Main Division	743	54	76	282	94	80	0	157
Columbia University Teachers College	0	0	0	0	0	0	0	0
Cooper Union	54	0	0	0	0	0	0	54
Cornell University	926	66	188	267	0	118	114	173
Fordham University	0	0	0	0	0	0	0	0
Hofstra University	0	0	0	0	0	0	0	0
Iona College	0	0	0	0	0	0	0	0
Ithaca College	0	0	0	0	0	0	0	0
Long Island University	0	0	0	0	0	0	0	0
Manhattan College	331	25	138	80	0	88	0	0
Marist College	0	0	0	0	0	0	0	0
New School for Social Research	0	0	0	0	0	0	0	0
New York Institute of Technology	185	0	0	0	185	0	0	0
New York Medical College	0	0	0	0	0	0	0	0
New York University	0	0	0	0	0	0	0	0
Niagara University	0	0	0	0	0	0	0	0
Pace University	0	0	0	0	0	0	0	0
Polytechnic University	1,086	31	232	623	73	71	40	16
Pratt Institute	8	0	0	8	0	0	0	0
Rensselaer Polytechnic Institute	1,373	73	205	368	119	312	205	91
Rochester Institute of Technology	277	0	0	144	45	26	29	33
Rockefeller University	0	0	0	0	0	0	0	0
Russell Sage College	0	0	0	0	0	0	0	0
SUNY - Albany	0	0	0	0	0	0	0	0
SUNY - Binghamton	439	0	0	0	0	0	0	439
SUNY - Buffalo	1,003	82	374	221	117	208	0	0
SUNY - Coll of Env Science and Forestry	89	0	89	0	0	0	0	0
SUNY - Health Sci Ctr at Brooklyn	0	0	0	0	0	0	0	0
SUNY - Health Sci Ctr at Syracuse	0	0	0	0	0	0	0	0
SUNY - Stony Brook	231	0	0	104	0	78	49	0
SUNY College at Brockport	0	0	0	0	0	0	0	0
SUNY College at Buffalo	0	0	0	0	0	0	0	0
SUNY College at Cortland	0	0	0	0	0	0	0	0
SUNY College at Fredonia	0	0	0	0	0	0	0	0
SUNY College at Geneseo	0	0	0	0	0	0	0	0
SUNY College at New Paltz	0	0	0	0	0	0	0	0
SUNY College at Oneonta	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE(S) at end of table.

**Table E-3. Graduate engineering students in all institutions,  
by geographic division, State, institution,  
and major field of engineering: 1991**

Page 3 of 11

Division, State, and Institution	Total, engi- neering	Chemical	Civil	Elec- trical	Indus- trial	Mechan- ical	Metallur- gical/ materials	All other engi- neering
<b>New York, continued</b>								
SUNY College at Oswego	0	0	0	0	0	0	0	0
SUNY College at Plattsburgh	0	0	0	0	0	0	0	0
SUNY College at Potsdam	0	0	0	0	0	0	0	0
SUNY College of Technology at Utica/Rom	0	0	0	0	0	0	0	0
SUNY State College of Optometry	0	0	0	0	0	0	0	0
Sarah Lawrence College	0	0	0	0	0	0	0	0
St Bonaventure University	0	0	0	0	0	0	0	0
St John's University	0	0	0	0	0	0	0	0
Syracuse University	791	28	64	611	0	88	0	0
Union College(NY)	86	0	0	18	0	68	0	0
University of Rochester	200	50	0	81	0	69	0	0
Vassar College	0	0	0	0	0	0	0	0
Wagner College	0	0	0	0	0	0	0	0
Yeshiva University	0	0	0	0	0	0	0	0
<b>Pennsylvania</b>	<b>8,219</b>	<b>506</b>	<b>611</b>	<b>1,748</b>	<b>780</b>	<b>992</b>	<b>408</b>	<b>1,174</b>
Bloomsburg University of Pennsylvania	0	0	0	0	0	0	0	0
Bryn Mawr College	0	0	0	0	0	0	0	0
Bucknell University	30	9	4	8	0	9	0	0
California University of Pennsylvania	0	0	0	0	0	0	0	0
Carnegie-Mellon University	602	91	74	226	0	103	56	52
Clarion University of Pennsylvania	0	0	0	0	0	0	0	0
Drexel University	993	38	102	388	90	164	62	149
Duquesne University	0	0	0	0	0	0	0	0
East Stroudsburg Univ of Pennsylvania	0	0	0	0	0	0	0	0
Edinboro University of Pennsylvania	0	0	0	0	0	0	0	0
Gannon University	47	0	0	0	0	0	0	47
Hahnemann University	0	0	0	0	0	0	0	0
Indiana University of Pennsylvania	0	0	0	0	0	0	0	0
Kutztown University of Pennsylvania	0	0	0	0	0	0	0	0
Lehigh University	634	99	84	202	80	91	78	0
Mansfield University of Pennsylvania	0	0	0	0	0	0	0	0
Marywood College	0	0	0	0	0	0	0	0
Millersville University of Pennsylvania	13	0	0	0	13	0	0	0
Pennsylvania State University	1,796	98	144	245	207	339	105	658
Phila College of Osteopathic Medicine	0	0	0	0	0	0	0	0
Philadelphia Coll of Pharmacy and Sci	0	0	0	0	0	0	0	0
Shippensburg University of Pennsylvania	0	0	0	0	0	0	0	0
Slippery Rock University of Pennsylvania	0	0	0	0	0	0	0	0
St Joseph's University	0	0	0	0	0	0	0	0
Swarthmore College	0	0	0	0	0	0	0	0
Temple University	89	0	0	13	76	0	0	0
The Medical College of Pennsylvania	0	0	0	0	0	0	0	0
Thomas Jefferson University	0	0	0	0	0	0	0	0
University of Pennsylvania	632	52	0	100	133	56	52	239
University of Pittsburgh	816	70	106	264	149	143	55	29
University of Scranton	0	0	0	0	0	0	0	0
Villanova University	417	45	89	221	0	62	0	0
West Chester University of Pennsylvania	0	0	0	0	0	0	0	0
Widener University	133	4	8	64	32	25	0	0
Wilkes University	17	0	0	17	0	0	0	0
<b>East North Central</b>	<b>20,472</b>	<b>1,330</b>	<b>2,608</b>	<b>5,875</b>	<b>2,619</b>	<b>3,921</b>	<b>1,102</b>	<b>3,017</b>
<b>Illinois</b>								
<b>Illinois</b>	<b>4,423</b>	<b>285</b>	<b>720</b>	<b>1,586</b>	<b>193</b>	<b>864</b>	<b>368</b>	<b>407</b>
Bradley University	185	0	24	41	49	71	0	0
Chicago Coll of Osteo Medicine	0	0	0	0	0	0	0	0
Chicago School of Prof Psych	0	0	0	0	0	0	0	0
Chicago State University	0	0	0	0	0	0	0	0
De Paul University	0	0	0	0	0	0	0	0
Eastern Illinois University	0	0	0	0	0	0	0	0
Forest Institute of Prof Psych	0	0	0	0	0	0	0	0
Governors State University	0	0	0	0	0	0	0	0
Illinois Institute of Technology	701	90	149	293	0	98	71	0
Illinois State University	0	0	0	0	0	0	0	0
Loyola University of Chicago	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE(S) at end of table.

**Table E-3. Graduate engineering students in all institutions,  
by geographic division, State, institution, and major field of engineering: 1991**

Page 4 of 11

Division, State, and institution	Total, engi- neering	Chemical	Civil	Electrical	Industrial	Mechanical	Metallurgical/ materials	All other engineering
<b>Illinois, continued</b>								
Northeastern Illinois University	0	0	0	0	0	0	0	0
Northern Illinois University	179	0	0	101	57	21	0	0
Northwestern University	633	67	91	112	53	90	130	90
Roosevelt University	0	0	0	0	0	0	0	0
Rush University	0	0	0	0	0	0	0	0
Sangamon State University	0	0	0	0	0	0	0	0
Southern Illinois Univ at Carbondale	242	0	25	82	34	38	0	63
Southern Illinois Univ at Edwardsville	100	0	27	73	0	0	0	0
University of Chicago	0	0	0	0	0	0	0	0
University of Health Sciences (Chicago)	0	0	0	0	0	0	0	0
University of Illinois at Chicago	943	55	190	420	0	247	0	31
University of Illinois at Urbana	1,440	73	214	464	0	299	167	223
Western Illinois University	0	0	0	0	0	0	0	0
<b>Indiana</b>	<b>2,090</b>	<b>164</b>	<b>294</b>	<b>732</b>	<b>164</b>	<b>345</b>	<b>47</b>	<b>344</b>
Ball State University	0	0	0	0	0	0	0	0
Butler University	0	0	0	0	0	0	0	0
Indiana State University	35	0	0	35	0	0	0	0
Indiana University	45	0	0	0	0	28	0	17
Indiana Wesleyan University	0	0	0	0	0	0	0	0
Purdue University	1,672	117	260	573	153	267	31	271
Rose-Hulman Institute of Technology	105	7	0	50	0	48	0	0
Saint Francis College	0	0	0	0	0	0	0	0
University of Evansville	13	0	0	0	11	2	0	0
University of Notre Dame	220	40	34	74	0	0	16	56
Valparaiso University	0	0	0	0	0	0	0	0
<b>Michigan</b>	<b>5,393</b>	<b>333</b>	<b>505</b>	<b>1,531</b>	<b>827</b>	<b>1,078</b>	<b>196</b>	<b>923</b>
Andrews University	0	0	0	0	0	0	0	0
Central Michigan University	0	0	0	0	0	0	0	0
Eastern Michigan University	223	0	0	0	223	0	0	0
Grand Valley State University	0	0	0	0	0	0	0	0
Michigan State University	520	77	127	137	0	60	77	42
Michigan Technological University	291	30	33	68	0	83	40	37
Northern Michigan University	0	0	0	0	0	0	0	0
Oakland University	367	0	0	0	0	0	0	367
University of Detroit	164	19	20	34	35	53	0	3
University of Michigan	2,461	81	210	819	273	530	79	469
Wayne State University	1,086	103	115	451	116	296	0	5
Western Michigan University	281	23	0	22	180	56	0	0
<b>Ohio</b>	<b>6,098</b>	<b>427</b>	<b>667</b>	<b>1,531</b>	<b>913</b>	<b>1,324</b>	<b>362</b>	<b>874</b>
Air Force Institute of Technology	434	0	0	144	58	0	0	232
Antioch University	93	0	0	0	93	0	0	0
Bowling Green State University	0	0	0	0	0	0	0	0
Case Western Reserve University	643	46	40	126	75	156	89	111
Cleveland State University	412	20	78	171	54	89	0	0
John Carroll University	0	0	0	0	0	0	0	0
Kent State University	0	0	0	0	0	0	0	0
Medical College of Ohio at Toledo	0	0	0	0	0	0	0	0
Miami University	15	15	0	0	0	0	0	0
NE Ohio Univ Med School	0	0	0	0	0	0	0	0
Ohio State University	1,237	68	166	308	84	314	88	209
Ohio University	277	22	24	95	59	77	0	0
Union Institute	4	0	0	0	0	0	0	4
University of Akron	495	156	49	113	0	128	0	49
University of Cincinnati	1,116	56	231	198	0	311	114	206
University of Dayton	667	6	6	197	206	129	60	63
University of Toledo	318	38	56	82	40	102	0	0
Wright State University	309	0	0	65	244	0	0	0
Xavier University	0	0	0	0	0	0	0	0
Youngstown State University	78	0	17	32	0	18	11	0
<b>Wisconsin</b>	<b>2,468</b>	<b>121</b>	<b>422</b>	<b>495</b>	<b>522</b>	<b>310</b>	<b>129</b>	<b>469</b>
Marquette University	397	0	75	183	0	83	0	56
Medical College of Wisconsin	0	0	0	0	0	0	0	0
Milwaukee School of Engineering	349	0	0	0	280	0	0	69
University of Wisconsin - Eau Claire	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE(S) at end of table.

**Table E-3. Graduate engineering students in all institutions,  
by geographic division, State, institution,  
and major field of engineering: 1991**

Page 5 of 11

Division, State, and institution	Total, engi- neering	Chemical	Civil	Elec- trical	Indus- trial	Mechan- ical	Metallur- gical/ materials	All other engi- neering
Wisconsin, continued								
University of Wisconsin - Green Bay	0	0	0	0	0	0	0	0
University of Wisconsin - La Crosse	0	0	0	0	0	0	0	0
University of Wisconsin - Madison	1,228	121	176	312	164	227	129	99
University of Wisconsin - Milwaukee	416	0	171	0	0	0	0	245
University of Wisconsin - Oshkosh	0	0	0	0	0	0	0	0
University of Wisconsin - Platteville	9	0	0	0	9	0	0	0
University of Wisconsin - River Falls	0	0	0	0	0	0	0	0
University of Wisconsin - Stevens Point	0	0	0	0	0	0	0	0
University of Wisconsin - Stout	69	0	0	0	69	0	0	0
University of Wisconsin - Whitewater	0	0	0	0	0	0	0	0
West North Central	6,707	537	1,159	1,626	1,104	1,265	209	807
Iowa	1,291	85	295	278	167	200	74	192
Drake University	0	0	0	0	0	0	0	0
Iowa State University of Sci & Tech	849	54	195	171	107	103	74	145
Loras College	0	0	0	0	0	0	0	0
Maharishi International University	0	0	0	0	0	0	0	0
Teikyo Marycrest College	0	0	0	0	0	0	0	0
Univ. of Osteopathic Med & Health Sci	0	0	0	0	0	0	0	0
University of Iowa	442	31	100	107	60	97	0	47
University of Northern Iowa	0	0	0	0	0	0	0	0
Kansas	1,153	55	234	246	276	142	13	187
Emporia State University - Kansas	0	0	0	0	0	0	0	0
Fort Hays State University	0	0	0	0	0	0	0	0
Kansas State University	289	27	31	71	60	52	13	35
Pittsburg State University	48	0	0	0	0	0	0	48
University of Kansas	501	28	203	94	97	42	0	37
Washburn University of Topeka	0	0	0	0	0	0	0	0
Wichita State University	315	0	0	81	119	48	0	67
Minnesota	1,236	225	211	263	0	361	0	176
Bemidji State University	0	0	0	0	0	0	0	0
Mankato State University	0	0	0	0	0	0	0	0
Mayo Graduate School	0	0	0	0	0	0	0	0
Moorhead State University	0	0	0	0	0	0	0	0
St Mary's College of Minnesota	0	0	0	0	0	0	0	0
St. Cloud State University	0	0	0	0	0	0	0	0
University of Minnesota	1,236	225	211	263	0	361	0	176
Missouri	1,992	132	164	634	450	388	82	142
Central Missouri State University	41	0	0	0	41	0	0	0
Kirkville College of Osteopathic Med	0	0	0	0	0	0	0	0
Lincoln University	0	0	0	0	0	0	0	0
Northeast Missouri State University	0	0	0	0	0	0	0	0
Northwest Missouri State University	0	0	0	0	0	0	0	0
Southeast Missouri State University	0	0	0	0	0	0	0	0
Southwest Missouri State University	0	0	0	0	0	0	0	0
St. Louis University	10	0	0	0	0	0	0	10
Univ of Health Sciences (Kansas City)	0	0	0	0	0	0	0	0
University of Missouri - Columbia	526	49	62	188	71	65	0	93
University of Missouri - Kansas City	0	0	0	0	0	0	0	0
University of Missouri - Rolla	934	27	0	260	290	176	82	39
University of Missouri - St Louis	0	0	0	0	0	0	0	0
Washington University	481	56	42	188	48	147	0	0
Nebraska	484	21	139	75	119	92	0	38
Creighton University	0	0	0	0	0	0	0	0
Kearney State College	0	0	0	0	0	0	0	0
University of Nebraska - Lincoln	484	21	139	75	119	92	0	38
University of Nebraska - Omaha	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE(S) at end of table.

**Table E-3. Graduate engineering students in all institutions,  
by geographic division, State, institution,  
and major field of engineering: 1991**

Page 6 of 11

Division, State, and institution	Total, engi- neering	Chemical	Civil	Elec- trical	Indus- trial	Mechan- ical	Metallur- gical/ materials	All other engi- neering
Nebraska, continued								
University of Nebraska Medical Center	0	0	0	0	0	0	0	0
North Dakota	156	9	27	61	12	13	0	34
North Dakota State University	119	0	19	44	12	10	0	34
University of North Dakota	37	9	8	17	0	3	0	0
South Dakota	395	10	89	69	80	69	40	38
South Dakota School of Mines and Tech	196	10	48	45	0	32	40	21
South Dakota State University	193	0	41	24	80	37	0	17
University of South Dakota	0	0	0	0	0	0	0	0
South Atlantic	17,296	841	2,754	4,958	2,775	2,267	723	2,978
Delaware	402	134	91	73	0	83	21	0
Delaware State College	0	0	0	0	0	0	0	0
University of Delaware	402	134	91	73	0	83	21	0
District of Columbia	1,918	6	402	528	824	158	0	0
Catholic University of America	259	0	43	77	0	139	0	0
Gallaudet University	0	0	0	0	0	0	0	0
George Washington University	1,569	0	331	414	824	0	0	0
Georgetown University	0	0	0	0	0	0	0	0
Howard University	90	6	28	37	0	19	0	0
The American University	0	0	0	0	0	0	0	0
University of the District of Columbia	0	0	0	0	0	0	0	0
Florida	3,874	90	564	1,262	381	443	137	997
Florida A & M University	43	2	30	3	0	8	0	0
Florida Atlantic University	347	0	19	187	11	73	0	57
Florida Institute of Technology	319	5	40	194	0	50	0	30
Florida International University	162	0	54	65	13	30	0	0
Florida State University	157	8	30	70	0	49	0	0
Jacksonville University	0	0	0	0	0	0	0	0
Nova University	0	0	0	0	0	0	0	0
University of Central Florida	606	0	0	0	0	0	0	606
University of Florida	1,252	39	267	347	57	159	137	246
University of Miami	318	0	46	54	120	40	0	58
University of South Florida	670	36	78	342	180	34	0	0
University of West Florida	0	0	0	0	0	0	0	0
Georgia	2,650	153	429	728	570	329	129	312
Augusta College	0	0	0	0	0	0	0	0
Clark Atlanta University	0	0	0	0	0	0	0	0
Emory University	0	0	0	0	0	0	0	0
Fort Valley State College	0	0	0	0	0	0	0	0
Georgia College	0	0	0	0	0	0	0	0
Georgia Institute of Technology	2,484	83	429	700	536	311	129	296
Georgia Southern University	0	0	0	0	0	0	0	0
Georgia State University	0	0	0	0	0	0	0	0
Institute of Paper Science & Technology	70	70	0	0	0	0	0	0
Medical College of Georgia	0	0	0	0	0	0	0	0
Mercer University	83	0	0	28	34	18	0	3
Morehouse School of Medicine	0	0	0	0	0	0	0	0
University of Georgia	13	0	0	0	0	0	0	13
Valdosta State College	0	0	0	0	0	0	0	0
West Georgia College	0	0	0	0	0	0	0	0
Maryland	2,024	127	289	874	109	284	72	269
Coppin State College	0	0	0	0	0	0	0	0
Frostburg State University	0	0	0	0	0	0	0	0
Hood College	0	0	0	0	0	0	0	0
Johns Hopkins University	220	39	29	48	0	36	0	68
Loyola College	278	0	0	278	0	0	0	0
Morgan State University	0	0	0	0	0	0	0	0
Towson State University	0	0	0	0	0	0	0	0
Uniformed Serv Univ of the Hlth Science	0	0	0	0	0	0	0	0
University of Baltimore	0	0	0	0	0	0	0	0
University of Maryland - Balt Prof Sch	0	0	0	0	0	0	0	0
University of Maryland - Baltimore Cnty	212	21	0	75	82	34	0	0
University of Maryland - College Park	1,314	67	260	473	27	214	72	201
University of Maryland Eastern Shore	0	0	0	0	0	0	0	0
Washington College	0	0	0	0	0	0	0	0
North Carolina	1,828	107	271	581	108	309	207	245
Appalachian State University	0	0	0	0	0	0	0	0
Duke University	264	0	65	86	0	54	0	59
East Carolina University	0	0	0	0	0	0	0	0
North Carolina A & T State University	183	8	17	77	34	47	0	0

See explanatory information, if any, and SOURCE(S) at end of table.



**Table E-3. Graduate engineering students in all institutions,  
by geographic division, State, institution,  
and major field of engineering: 1991**

Page 7 of 11

Division, State, and institution	Total, engi- neering	Chemical	Civil	Elec- trical	Indus- trial	Mechan- ical	Metallur- gical/ materials	All other engi- neering
<b>North Carolina, continued</b>								
North Carolina Central University	0	0	0	0	0	0	0	0
North Carolina State Univ at Raleigh	1,223	99	151	365	74	187	207	145
Univ of North Carolina at Chapel Hill	41	0	0	0	0	0	0	41
Univ of North Carolina at Charlotte	117	0	38	53	0	26	0	0
Univ of North Carolina at Greensboro	0	0	0	0	0	0	0	0
University of North Carolina/Wilmington	0	0	0	0	0	0	0	0
Wake Forest University	0	0	0	0	0	0	0	0
Western Carolina University	0	0	0	0	0	0	0	0
<b>South Carolina</b>	<b>1,132</b>	<b>33</b>	<b>288</b>	<b>174</b>	<b>65</b>	<b>126</b>	<b>39</b>	<b>407</b>
Clemson University	802	33	288	174	65	126	39	77
College of Charleston	0	0	0	0	0	0	0	0
Furman University	0	0	0	0	0	0	0	0
Medical University of South Carolina	0	0	0	0	0	0	0	0
University of South Carolina	330	0	0	0	0	0	0	330
Winthrop College	0	0	0	0	0	0	0	0
<b>Virginia</b>	<b>2,956</b>	<b>132</b>	<b>343</b>	<b>668</b>	<b>587</b>	<b>427</b>	<b>118</b>	<b>681</b>
College of William and Mary	16	0	0	0	0	0	0	16
Eastern Virginia Medical School	0	0	0	0	0	0	0	0
George Mason University	317	0	0	158	126	0	0	33
Hampton University	0	0	0	0	0	0	0	0
Hollins College	0	0	0	0	0	0	0	0
Institute of Textile Technology	30	0	0	0	0	0	0	30
James Madison University	0	0	0	0	0	0	0	0
Old Dominion University	426	0	70	59	0	125	0	172
Radford University	0	0	0	0	0	0	0	0
University of Richmond	0	0	0	0	0	0	0	0
University of Virginia	632	83	59	142	67	110	73	98
Virginia Commonwealth University	16	0	0	0	0	0	0	16
Virginia Polytechnic Inst and State Uni	1,519	49	214	309	394	192	45	316
Virginia State University	0	0	0	0	0	0	0	0
<b>West Virginia</b>	<b>512</b>	<b>59</b>	<b>77</b>	<b>70</b>	<b>131</b>	<b>108</b>	<b>0</b>	<b>67</b>
Marshall University	0	0	0	0	0	0	0	0
Univ of West Virginia Coll of Grad Stds	90	29	1	0	60	0	0	0
University of Charleston	0	0	0	0	0	0	0	0
West Virginia Institute of Technology	15	0	0	0	0	0	0	15
West Virginia Sch of Osteopathic Med	0	0	0	0	0	0	0	0
West Virginia University	407	30	76	70	71	108	0	52
<b>East South Central</b>	<b>4,868</b>	<b>350</b>	<b>604</b>	<b>1,346</b>	<b>720</b>	<b>825</b>	<b>296</b>	<b>727</b>
<b>Alabama</b>	<b>1,808</b>	<b>115</b>	<b>132</b>	<b>546</b>	<b>263</b>	<b>403</b>	<b>190</b>	<b>159</b>
Alabama A & M University	0	0	0	0	0	0	0	0
Alabama State University	0	0	0	0	0	0	0	0
Auburn University	590	74	87	90	77	100	75	87
Jacksonville State University	0	0	0	0	0	0	0	0
The University of Alabama	308	15	38	63	59	63	49	21
The University of Alabama at Birmingham	168	0	7	33	0	32	45	51
The University of Alabama in Huntsville	636	14	0	307	127	167	21	0
Troy State University in Montgomery	0	0	0	0	0	0	0	0
Tuskegee University	35	0	0	15	0	20	0	0
University of Montevallo	0	0	0	0	0	0	0	0
University of South Alabama	71	12	0	38	0	21	0	0
<b>Kentucky</b>	<b>882</b>	<b>74</b>	<b>120</b>	<b>283</b>	<b>168</b>	<b>141</b>	<b>34</b>	<b>62</b>
Eastern Kentucky University	0	0	0	0	0	0	0	0
Morehead State University	0	0	0	0	0	0	0	0
Murray State University	52	0	0	0	52	0	0	0
Spalding University	0	0	0	0	0	0	0	0
University of Kentucky	363	31	88	100	0	68	34	62
University of Louisville	467	43	52	183	116	73	0	0
Western Kentucky University	0	0	0	0	0	0	0	0
<b>Mississippi</b>	<b>448</b>	<b>52</b>	<b>53</b>	<b>161</b>	<b>38</b>	<b>71</b>	<b>0</b>	<b>73</b>
Jackson State University	0	0	0	0	0	0	0	0
Mississippi State University	345	38	17	132	38	47	0	73
Mississippi University for Women	0	0	0	0	0	0	0	0
University of Mississippi	103	14	36	29	0	24	0	0
University of Southern Mississippi	0	0	0	0	0	0	0	0
<b>Tennessee</b>	<b>1,730</b>	<b>109</b>	<b>299</b>	<b>356</b>	<b>251</b>	<b>210</b>	<b>72</b>	<b>433</b>
Austin Peay State University	0	0	0	0	0	0	0	0
East Tennessee State University	0	0	0	0	0	0	0	0
Fisk University	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE(S) at end of table.

**Table E-3. Graduate engineering students in all institutions,  
by geographic division, State, institution,  
and major field of engineering: 1991**

Page 8 of 11

Division, State, and institution	Total, engi- neering	Chemical	Civil	Elec- trical	Indus- trial	Mechan- ical	Metallur- gical/ materials	All other engi- neering
<b>Tennessee, continued</b>								
Meharry Medical College	0	0	0	0	0	0	0	0
Memphis State University	165	0	49	69	0	29	0	18
Middle Tennessee State University	0	0	0	0	0	0	0	0
Tennessee State University	41	0	0	0	0	0	0	41
Tennessee Technological University	170	12	11	46	8	41	0	52
University of Tennessee at Chattanooga	77	0	0	0	0	0	0	77
University of Tennessee at Knoxville	1,009	76	181	153	243	97	43	216
University of Tennessee, Memphis	0	0	0	0	0	0	0	0
Vanderbilt University	268	21	58	88	0	43	29	29
<b>West South Central</b>	<b>11,757</b>	<b>882</b>	<b>1,962</b>	<b>3,359</b>	<b>1,666</b>	<b>1,693</b>	<b>175</b>	<b>2,020</b>
<b>Arkansas</b>								
Arkansas State University	0	0	0	0	0	0	0	0
University of Arkansas	669	32	34	135	391	24	0	53
University of Arkansas - Med Sci Campus	0	0	0	0	0	0	0	0
University of Arkansas at Little Rock	0	0	0	0	0	0	0	0
University of Central Arkansas	0	0	0	0	0	0	0	0
<b>Louisiana</b>								
Grambling State University	0	0	0	0	0	0	0	0
Louisiana State University System	768	83	102	202	63	67	0	251
Louisiana Tech University	210	0	0	0	0	0	0	210
Loyola University in New Orleans	0	0	0	0	0	0	0	0
McNeese State University	16	0	0	0	0	0	0	16
Nicholls State University	0	0	0	0	0	0	0	0
Northeast Louisiana University	0	0	0	0	0	0	0	0
Northwest State University	0	0	0	0	0	0	0	0
Southeastern Louisiana University	0	0	0	0	0	0	0	0
Southern University A & M College	0	0	0	0	0	0	0	0
Tulane University of Louisiana	154	36	29	18	0	27	0	44
University of Southwestern Louisiana	109	5	15	5	30	30	0	24
Xavier University	0	0	0	0	0	0	0	0
<b>Oklahoma</b>	<b>1,489</b>	<b>136</b>	<b>256</b>	<b>324</b>	<b>321</b>	<b>168</b>	<b>0</b>	<b>284</b>
East Central University	0	0	0	0	0	0	0	0
Northeastern State University	70	0	0	0	70	0	0	0
Oklahoma State University	608	49	107	139	107	153	0	53
Southwestern Oklahoma State University	0	0	0	0	0	0	0	0
University of Oklahoma	705	59	149	169	140	0	0	168
University of Tulsa	106	28	0	16	4	15	0	43
<b>Texas</b>	<b>8,342</b>	<b>590</b>	<b>1,526</b>	<b>2,675</b>	<b>861</b>	<b>1,377</b>	<b>175</b>	<b>1,138</b>
Abilene Christian University	0	0	0	0	0	0	0	0
Angelo State University	0	0	0	0	0	0	0	0
Baylor College of Dentistry	0	0	0	0	0	0	0	0
Baylor College of Medicine	0	0	0	0	0	0	0	0
Baylor University	0	0	0	0	0	0	0	0
Corpus Christi State University	0	0	0	0	0	0	0	0
East Texas State University	0	0	0	0	0	0	0	0
Incarnate Word College	0	0	0	0	0	0	0	0
Lamar University	239	33	68	27	68	43	0	0
Midwestern State University	0	0	0	0	0	0	0	0
Prairie View A & M University	20	0	0	0	0	0	0	20
Rice University	243	57	25	96	0	65	0	0
Sam Houston State University	0	0	0	0	0	0	0	0
Southern Methodist University	505	0	26	362	74	39	4	0
Southwest Texas State University	0	0	0	0	0	0	0	0
St Mary's University of San Antonio	45	0	0	0	0	0	0	45
Stephen F. Austin State University	0	0	0	0	0	0	0	0
Sul Ross State University	0	0	0	0	0	0	0	0
Tarleton State University	0	0	0	0	0	0	0	0
Texas A & I University	180	27	7	70	53	18	0	5
Texas A & M University	1,631	129	318	414	193	257	0	320
Texas Christian University	0	0	0	0	0	0	0	0
Texas College of Osteopathic Medicine	0	0	0	0	0	0	0	0
Texas Southern University	0	0	0	0	0	0	0	0
Texas Tech University	362	28	87	53	94	68	0	32
Texas Woman's University	0	0	0	0	0	0	0	0
The University of Texas - Pan American	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE(S) at end of table.

**Table E-3. Graduate engineering students in all institutions,  
by geographic division, State, institution,  
and major field of engineering: 1991**

Page 9 of 11

Division, State, and institution	Total, engi- neering	Chemical	Civil	Elec- trical	Indus- trial	Mechan- ical	Metallur- gical/ materials	All other engi- neering
<b>Texas, continued</b>								
Tnnity University	0	0	0	0	0	0	0	0
Univ of Texas Hlth Sci Ctr San Antonio	0	0	0	0	0	0	0	0
Univ of Texas Hlth Sci Ctr at Houston	0	0	0	0	0	0	0	0
Univ of Texas MD Anderson Cancer Center	0	0	0	0	0	0	0	0
Unlv of Texas Med Branch at Galveston	0	0	0	0	0	0	0	0
Univ of Texas SW Medical Ctr at Dallas	25	0	0	0	0	0	0	25
Univ of Texas at Arlington	947	0	120	377	103	158	32	157
Univ of Texas at Austin	2,021	131	413	529	0	424	100	424
Univ of Texas at Dallas	240	0	0	216	0	0	0	24
Univ of Texas at El Paso	293	0	81	83	60	49	20	0
University of Central Texas	0	0	0	0	0	0	0	0
University of Houston - Victoria	0	0	0	0	0	0	0	0
University of Houston at Clear Lake Cit	135	0	89	25	21	0	0	0
University of Houston-University Park	1,321	185	278	362	161	246	19	70
University of North Texas	34	0	0	0	34	0	0	0
University of Texas at San Antonio	85	0	14	61	0	10	0	0
University of Texas at Tyler	0	0	0	0	0	0	0	0
University of Texas of the Permian Basi	1	0	0	0	0	0	0	1
West Texas State University	15	0	0	0	0	0	0	15
<b>Mountain</b>	<b>7,557</b>	<b>584</b>	<b>1,384</b>	<b>2,706</b>	<b>453</b>	<b>886</b>	<b>397</b>	<b>1,147</b>
<b>Arizona</b>	<b>2,145</b>	<b>180</b>	<b>327</b>	<b>791</b>	<b>251</b>	<b>166</b>	<b>60</b>	<b>370</b>
Arizona State University	1,392	145	247	483	175	157	0	185
Northern Arizona University	0	0	0	0	0	0	0	0
University of Anzona	753	35	80	308	76	9	60	185
<b>Colorado</b>	<b>2,526</b>	<b>112</b>	<b>470</b>	<b>1,069</b>	<b>176</b>	<b>187</b>	<b>125</b>	<b>387</b>
Colorado School of Mines	228	38	0	0	0	18	106	66
Colorado State University	440	15	204	79	21	86	0	35
National Technological University	507	0	0	335	155	0	11	6
University of Colorado	1,343	59	266	655	0	83	0	280
University of Denver	8	0	0	0	0	0	8	0
University of Northern Colorado	0	0	0	0	0	0	0	0
<b>Idaho</b>	<b>371</b>	<b>64</b>	<b>48</b>	<b>92</b>	<b>0</b>	<b>91</b>	<b>34</b>	<b>42</b>
Idaho State University	31	0	0	0	0	0	0	31
University of Idaho	340	64	48	92	0	91	34	11
<b>Montana</b>	<b>155</b>	<b>18</b>	<b>46</b>	<b>20</b>	<b>16</b>	<b>13</b>	<b>12</b>	<b>30</b>
Montana College Mineral Sci & Technolog	64	0	22	0	0	0	12	30
Montana State University	91	18	24	20	16	13	0	0
University of Montana	0	0	0	0	0	0	0	0
<b>Nevada</b>	<b>229</b>	<b>0</b>	<b>73</b>	<b>54</b>	<b>0</b>	<b>32</b>	<b>15</b>	<b>55</b>
University of Nevada at Las Vegas	37	0	37	0	0	0	0	0
University of Nevada at Reno	192	0	36	54	0	32	15	55
<b>New Mexico</b>	<b>851</b>	<b>123</b>	<b>139</b>	<b>401</b>	<b>0</b>	<b>119</b>	<b>25</b>	<b>44</b>
Eastern New Mexico University	0	0	0	0	0	0	0	0
New Mexico Highlands University	0	0	0	0	0	0	0	0
New Mexico Institute of Mining and Tech	69	0	0	0	0	0	25	44
New Mexico State University	300	40	49	169	0	42	0	0
University of New Mexico	482	83	90	232	0	77	0	0
<b>Utah</b>	<b>1,103</b>	<b>65</b>	<b>222</b>	<b>236</b>	<b>10</b>	<b>246</b>	<b>126</b>	<b>198</b>
Brigham Young University	226	27	29	61	10	72	0	27
University of Utah	561	38	38	104	0	147	126	108
Utah State University	316	0	155	71	0	27	0	63
<b>Wyoming</b>	<b>177</b>	<b>22</b>	<b>59</b>	<b>43</b>	<b>0</b>	<b>32</b>	<b>0</b>	<b>21</b>
University of Wyoming	177	22	59	43	0	32	0	21
<b>Pacific</b>	<b>18,190</b>	<b>621</b>	<b>2,532</b>	<b>6,612</b>	<b>1,483</b>	<b>2,601</b>	<b>738</b>	<b>3,603</b>
<b>Alaska</b>	<b>211</b>	<b>0</b>	<b>20</b>	<b>14</b>	<b>17</b>	<b>15</b>	<b>0</b>	<b>145</b>
University of Alaska Southeast	0	0	0	0	0	0	0	0
University of Alaska at Anchorage	102	0	0	0	0	0	0	102
University of Alaska at Fairbanks	109	0	20	14	17	15	0	43
<b>California</b>	<b>15,348</b>	<b>479</b>	<b>2,008</b>	<b>5,804</b>	<b>1,292</b>	<b>2,226</b>	<b>622</b>	<b>2,917</b>
Azusa Pacific University	0	0	0	0	0	0	0	0
Biola University	0	0	0	0	0	0	0	0
Calif Poly State Univ at San Luis Obisp	125	0	38	19	0	0	0	68

See explanatory information, if any, and SOURCE(S) at end of table.

**Table E-3. Graduate engineering students in all institutions,  
by geographic division, State, institution,  
and major field of engineering: 1991**

Page 10 of 11

Division, State, and institution	Total, engi- neering	Chemical	Civil	Elec- trical	Indus- trial	Mechan- ical	Metallur- gical/ materials	All other engi- neering
California, continued								
Calif Sch of Prof Psych - Fresno	0	0	0	0	0	0	0	0
Calif Sch of Prof Psych - Los Angeles	0	0	0	0	0	0	0	0
Calif Sch of Prof Psych - San Diego	0	0	0	0	0	0	0	0
Calif Sch of Prof Psych-Berkeley/Alameda	0	0	0	0	0	0	0	0
Calif State Polytechnic Univ at Pomona	126	0	35	0	0	0	0	91
Calif State Univ at Dominguez Hills	90	0	0	0	0	0	0	90
Calif State Univ at Fullerton	248	0	49	131	0	64	0	4
Calif State Univ at Hayward	0	0	0	0	0	0	0	0
Calif State Univ at Long Beach	719	0	156	273	0	167	0	123
Calif State Univ at Los Angeles	186	0	43	100	0	36	0	7
Calif State Univ at San Bernardino	0	0	0	0	0	0	0	0
Calif State Univ of Stanislaus	0	0	0	0	0	0	0	0
Calif State University at Chico	15	0	0	15	0	0	0	0
Calif State University at Fresno	36	0	36	0	0	0	0	0
Calif State University at Northridge	640	0	72	281	82	110	10	85
Calif State University at Sacramento	223	0	61	85	0	42	0	35
California Institute of Integral Studie	0	0	0	0	0	0	0	0
California Institute of Technology	427	65	40	107	0	74	18	123
California State Univ - Bakersfield	0	0	0	0	0	0	0	0
Chapman University	0	0	0	0	0	0	0	0
Charles R. Drew Univ of Medicine & Sci	0	0	0	0	0	0	0	0
Claremont Univ Center & Graduate School	0	0	0	0	0	0	0	0
Dominican College of San Rafael	0	0	0	0	0	0	0	0
Fuller Theological Seminary	0	0	0	0	0	0	0	0
Golden Gate University	0	0	0	0	0	0	0	0
Harvey Mudd College	6	0	0	0	0	0	0	6
Humboldt State University	54	0	54	0	0	0	0	0
John F Kennedy University	0	0	0	0	0	0	0	0
Loma Linda University	0	0	0	0	0	0	0	0
Loyola Marymount University	57	0	26	20	0	11	0	0
National University	200	0	0	152	0	0	0	48
Occidental College	0	0	0	0	0	0	0	0
Pacific Grad School of Prof Psych	0	0	0	0	0	0	0	0
Pacific States University	23	0	0	23	0	0	0	0
Pepperdine University	0	0	0	0	0	0	0	0
Rand Graduate School of Policy Studies	0	0	0	0	0	0	0	0
San Diego State University	286	0	44	123	0	90	0	29
San Francisco State University	0	0	0	0	0	0	0	0
San Jose State University	847	18	114	379	65	83	50	138
Santa Clara University	638	0	7	410	137	58	0	26
Sonoma State University	0	0	0	0	0	0	0	0
Stanford University	2,330	61	236	693	118	501	143	578
The Fielding Institute	0	0	0	0	0	0	0	0
The Wright Institute	0	0	0	0	0	0	0	0
US International University	0	0	0	0	0	0	0	0
US Naval Postgraduate School	799	0	0	271	122	141	0	265
University of Calif at Berkeley	1,570	132	509	349	76	274	131	99
University of Calif at Davis	606	31	116	134	0	170	4	151
University of Calif at Irvine	359	0	0	0	0	0	0	359
University of Calif at Los Angeles	783	49	95	348	7	114	86	84
University of Calif at Riverside	0	0	0	0	0	0	0	0
University of Calif at San Diego	412	16	0	81	26	62	30	197
University of Calif at San Francisco	23	0	0	0	0	0	0	23
University of Calif at Santa Barbara	474	50	0	241	0	104	79	0
University of Calif at Santa Cruz	44	0	0	44	0	0	0	0
University of La Verne	0	0	0	0	0	0	0	0
University of Redlands	0	0	0	0	0	0	0	0
University of San Diego	0	0	0	0	0	0	0	0
University of San Francisco	88	0	88	0	0	0	0	0
University of Southern California	2,727	57	189	1,477	640	114	71	179

See explanatory information, if any, and SOURCE(S) at end of table.

**Table E-3. Graduate engineering students in all institutions,  
by geographic division, State, institution,  
and major field of engineering: 1991**

Page 11 of 11

Division, State, and Institution	Total, engi- neering	Chemical	Civil	Elec- trical	Indus- trial	Mechan- ical	Metallur- gical/ materials	All other engi- neering
California, continued								
University of the Pacific	5	0	0	5	0	0	0	0
West Coast University	182	0	0	43	19	11	0	109
Hawaii	216	0	34	86	0	37	0	59
University of Hawaii at Manoa	216	0	34	86	0	37	0	59
Oregon	862	62	138	237	92	100	37	196
Oregon Grad Inst of Science & Technolog	71	0	0	0	0	0	33	38
Oregon Health Sciences University	0	0	0	0	0	0	0	0
Oregon State University	497	62	106	126	41	79	4	79
Pacific University	0	0	0	0	0	0	0	0
Portland State University	275	0	32	111	51	21	0	60
Southern Oregon State College	0	0	0	0	0	0	0	0
University of Oregon	0	0	0	0	0	0	0	0
University of Portland	19	0	0	0	0	0	0	19
Washington	1,553	80	332	471	82	223	79	286
Central Washington University	0	0	0	0	0	0	0	0
Eastern Washington University	0	0	0	0	0	0	0	0
Gonzaga University	9	0	0	7	0	2	0	0
Pacific Lutheran University	0	0	0	0	0	0	0	0
Saint Martin's College	30	0	0	0	30	0	0	0
Seattle University	114	0	0	114	0	0	0	0
University of Washington	1,138	57	268	292	52	151	59	259
Walla Walla College	0	0	0	0	0	0	0	0
Washington State University	262	23	64	58	0	70	20	27
Western Washington University	0	0	0	0	0	0	0	0
Whitworth College	0	0	0	0	0	0	0	0
Outlying Areas	168	25	57	36	32	18	0	0
Guam	0	0	0	0	0	0	0	0
University of Guam	0	0	0	0	0	0	0	0
Puerto Rico	168	25	57	36	32	18	0	0
Caribbean Center for Advanced Studies	0	0	0	0	0	0	0	0
Catholic University of Puerto Rico	0	0	0	0	0	0	0	0
Ponce School of Medicine	0	0	0	0	0	0	0	0
University of Puerto Rico	168	25	57	36	32	18	0	0
University of Puerto Rico - Rio Piedras	0	0	0	0	0	0	0	0
University of Puerto Rico Med Sci Campu	0	0	0	0	0	0	0	0

NOTE: Includes medical schools

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



**Table E-4. Graduate students in the science, engineering, and health fields in all institutions, by geographic division, State, institution, and citizenship and racial/ethnic background of U.S. citizens: 1991**

Page 1 of 11

Division, State, and institution	Total	U.S. citizens						Non-U.S.
		Black non-Hispanic	American Indian/Alaskan Native	Asian/Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Total, all institutions	475,691	16,542	1,448	20,201	13,407	291,631	19,392	113,070
New England	34,932	582	53	1,288	454	21,312	2,750	8,493
Connecticut	7,217	148	8	250	87	5,097	250	1,377
Central Connecticut State University	32	2	0	8	0	21	1	0
Connecticut College	31	0	0	0	0	29	0	2
Quinnipiac College	197	9	0	4	4	172	7	1
Southern Connecticut State University	203	6	1	4	0	138	50	4
St. Joseph College	176	5	1	0	5	165	0	0
The Hartford Graduate Center	780	15	1	32	19	577	108	28
Trinity College	53	0	0	1	0	50	0	2
University of Bridgeport	33	0	0	1	0	27	0	5
University of Connecticut	2,551	31	1	61	19	1,717	36	686
University of Hartford	303	17	0	5	3	265	9	4
University of New Haven	837	21	0	21	9	650	21	115
Wesleyan University	128	3	0	1	2	70	0	52
Western Connecticut State University	32	0	0	0	0	31	0	1
Yale University	1,861	39	4	112	26	1,185	18	477
Maine	752	1	1	4	2	531	24	189
University of Maine	711	1	1	4	2	490	24	189
University of New England	41	0	0	0	0	41	0	0
Massachusetts	22,896	395	39	912	318	12,882	2,351	5,999
American International College	184	1	0	0	3	160	0	0
Anna Maria College	102	1	0	0	1	100	0	0
Assumption College	143	3	0	0	5	135	0	0
Boston College	678	13	0	21	7	511	1	125
Boston University	2,631	39	2	103	41	1,373	467	606
Brandeis University	428	2	0	9	3	223	0	191
Bridgewater State College	46	0	1	0	0	33	12	0
Clark University	275	7	1	5	5	174	0	83
Emerson College	72	1	0	0	0	70	0	1
Framingham State College	12	0	0	0	0	12	0	0
Harvard University	3,472	121	17	169	69	1,894	261	941
MGH Institute of Health Professions	193	2	0	1	0	183	0	7
Mass College of Pharmacy/Allied Health	46	0	0	1	0	17	0	28
Massachusetts Institute of Technology	4,243	74	6	312	61	2,349	6	1,435
Mount Holyoke College	14	2	0	1	1	9	0	1
Northeastern University	2,581	10	5	41	13	813	1,103	596
Salem State College	113	0	0	2	2	103	2	4
Smith College	6	0	0	1	0	5	0	0
Tufts University	1,044	17	0	38	12	740	0	237
University of Massachusetts	3,262	53	2	63	69	1,835	246	994
University of Massachusetts Dartmouth	187	2	2	6	0	110	0	67
University of Massachusetts Lowell	2,049	34	3	107	20	1,290	93	502
Western New England College	238	11	0	3	4	217	0	3
Williams College	14	0	0	0	0	0	0	14
Woods Hole Oceanographic Institution	0	0	0	0	0	0	0	0
Worcester Polytechnic Institute	882	2	0	29	2	526	159	164
Worcester State College	1	0	0	0	0	0	1	0
New Hampshire	1,199	7	1	28	9	825	68	261
Dartmouth College	362	3	1	14	4	224	0	116
Rivier College	140	3	0	8	0	79	34	16
University of New Hampshire	697	1	0	6	5	522	34	129
Rhode Island	2,184	28	4	84	27	1,427	54	560
Brown University	761	19	2	41	14	398	0	287
Providence College	0	0	0	0	0	0	0	0
Rhode Island College	84	0	0	0	0	50	34	0
University of Rhode Island	1,339	9	2	43	13	979	20	273
Vermont	684	3	0	10	11	550	3	107
Goddard College	35	0	0	0	0	35	0	0
Marlboro College	0	0	0	0	0	0	0	0
Middlebury College	1	0	0	0	0	1	0	0
University of Vermont & St Agric Colleg	648	3	0	10	11	514	3	107
Middle Atlantic	82,009	2,991	201	3,704	1,855	47,909	5,702	19,647
New Jersey	11,860	343	89	871	227	6,691	949	2,690
Drew University	21	0	0	0	1	15	0	5
Fairleigh Dickinson University	1,005	37	2	28	11	726	65	136
Kean College of New Jersey	131	5	0	0	4	117	5	0
Monmouth College(NJ)	250	3	0	15	8	149	52	23
Montclair State College	512	7	0	0	0	304	180	21
New Jersey Institute of Technology	1,848	56	0	416	45	622	87	622

See explanatory information, if any, and SOURCE(S) at end of table.

**Table E-4. Graduate students in the science, engineering, and health fields in all institutions, by geographic division, State, institution, and citizenship and racial/ethnic background of U.S. citizens: 1991**

Page 2 of 11

Division, State, and institution	Total	U.S. citizens						Non-U.S.
		Black non-Hispanic	American Indian/Alaskan Native	Asian/Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
New Jersey, continued								
Princeton University	1,374	33	0	75	25	726	16	499
Rutgers the State University	4,375	158	85	165	85	2,714	132	1,036
Seton Hall University	540	9	1	3	8	238	262	19
Stevens Institute of Technology	1,343	22	0	153	34	842	72	220
Trenton State College	35	0	0	2	0	29	4	0
Univ of Med and Dent of New Jersey	291	10	1	12	2	103	60	103
William Paterson College	135	3	0	2	4	106	14	6
New York	47,649	2,089	64	2,055	1,366	25,951	4,390	11,724
Adelphi University	798	38	1	33	17	613	87	9
Albany Medical College Grad Studies Pro	87	1	0	2	1	69	0	14
Alfred University	115	2	0	0	1	85	4	23
CUNY Bernard Baruch College	471	20	0	0	17	152	276	6
CUNY Brooklyn College	799	29	0	20	10	115	370	255
CUNY City College	1,263	136	1	187	84	181	119	555
CUNY College of Staten Island St George	93	1	0	7	3	50	6	26
CUNY Graduate School and Univ Center	1,841	65	0	31	55	882	41	767
CUNY Herbert H. Lehman College	61	10	0	3	11	16	11	10
CUNY Hunter College	749	106	2	43	49	404	99	46
CUNY John Jay College of Crim Justice	533	135	1	22	64	307	1	3
CUNY Mt. Sinai Sch of Medicine	164	1	0	7	2	61	0	93
CUNY Queens College	473	12	0	22	23	171	224	21
Clarkson University	286	0	0	0	1	123	0	162
College of New Rochelle	283	33	0	8	21	210	11	0
College of St Rose	121	0	0	1	0	98	22	0
Columbia University Main Division	2,964	65	2	192	70	1,440	5	1,190
Columbia University Teachers College	2,030	183	2	84	101	1,337	127	196
Cooper Union	54	1	0	14	3	5	31	0
Cornell University	3,453	59	9	156	65	1,807	0	1,357
Fordham University	598	16	0	6	42	346	41	147
Hofstra University	508	16	0	9	4	426	43	10
Iona College	614	28	1	6	10	217	351	1
Ithaca College	22	1	0	0	1	19	0	1
Long Island University	1,403	243	1	39	103	613	212	192
Manhattan College	362	13	0	47	16	237	17	32
Manst College	293	7	0	26	2	169	89	0
New School for Social Research	848	24	0	10	29	590	94	101
New York Institute of Technology	887	80	6	112	60	340	0	289
New York Medical College	203	7	1	3	1	109	18	64
New York University	3,315	227	2	146	111	1,715	501	613
Niagara University	13	0	0	0	0	7	0	6
Pace University	1,144	57	2	84	36	960	5	0
Polytechnic University	1,667	47	0	148	28	590	583	271
Pratt Institute	8	1	0	0	1	1	0	5
Rensselaer Polytechnic Institute	2,036	28	1	70	29	1,319	24	565
Rochester Institute of Technology	963	35	2	55	24	658	58	131
Rockefeller University	128	4	0	9	1	68	0	46
Russell Sage College	776	13	1	0	11	721	27	3
SUNY - Albany	1,384	62	3	27	33	819	71	369
SUNY - Binghamton	1,214	48	2	38	21	262	542	301
SUNY - Buffalo	3,445	45	14	84	51	2,006	175	1,070
SUNY - Coll of Env Science and Forestry	427	5	1	3	5	295	0	118
SUNY - Health Sci Ctr at Brooklyn	115	6	0	15	3	30	0	61
SUNY - Health Sci Ctr at Syracuse	82	4	0	2	0	41	0	35
SUNY - Stony Brook	2,406	49	4	125	46	1,272	39	871
SUNY College at Brockport	255	12	0	4	2	236	0	1
SUNY College at Buffalo	24	1	0	2	0	20	0	1
SUNY College at Cortland	14	1	0	0	0	12	0	1
SUNY College at Fredonia	21	0	0	0	0	20	0	1
SUNY College at Geneseo	42	1	0	0	2	39	0	0
SUNY College at New Paltz	225	10	0	10	5	150	13	37
SUNY College at Oneonta	5	0	0	0	0	5	0	0

See explanatory information, if any, and SOURCE(S) at end of table.

214

**Table E-4. Graduate students in the science, engineering, and health fields in all institutions, by geographic division, State, institution, and citizenship and racial/ethnic background of U.S. citizens: 1991**

Page 3 of 11

Page 3 of 1

Division, State, and institution	Total	U.S. citizens						Non-U.S.
		Black non-Hispanic	American Indian/Alaskan Native	Asian/Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
New York, continued								
SUNY College at Oswego	216	9	0	0	3	201	0	3
SUNY College at Plattsburgh	35	0	0	0	0	35	0	0
SUNY College at Potsdam	2	0	0	0	0	2	0	0
SUNY College of Technology at Utica/Rom	70	1	0	2	0	56	0	11
SUNY State College of Optometry	22	0	0	2	1	9	0	10
Sarah Lawrence College	42	2	0	3	1	33	1	2
St Bonaventure University	15	0	0	0	0	14	0	1
St John's University	705	22	1	21	24	488	0	149
Syracuse University	2,164	35	0	56	21	1,123	52	877
Union College(NY)	140	0	0	2	1	134	0	3
University of Rochester	1,422	17	3	40	11	648	0	503
Vassar College	3	0	0	0	0	3	0	0
Wagner College	96	4	0	3	0	82	0	7
Yeshiva University	632	11	1	14	29	495	0	82
Pennsylvania	22,500	559	48	778	262	15,257	363	5,233
Bloomsburg University of Pennsylvania	92	0	0	1	0	90	0	1
Bryn Mawr College	154	2	1	0	1	135	1	14
Bucknell University	57	0	0	0	0	39	0	18
California University of Pennsylvania	209	8	0	3	1	183	0	14
Carnegie-Mellon University	1,656	27	2	47	12	1,000	35	533
Clarion University of Pennsylvania	127	0	0	0	0	124	0	3
Drexel University	1,566	33	5	156	25	966	134	247
Duquesne University	401	16	1	0	5	334	0	45
East Stroudsburg Univ of Pennsylvania	103	3	0	0	2	87	0	11
Edinboro University of Pennsylvania	220	4	0	1	1	208	0	6
Gannon University	260	5	1	1	0	248	0	5
Hahnemann University	572	16	0	41	9	439	46	21
Indiana University of Pennsylvania	140	13	1	2	1	102	0	21
Kutztown University of Pennsylvania	173	3	0	1	1	168	0	0
Lehigh University	1,022	20	0	25	14	609	20	334
Mansfield University of Pennsylvania	16	0	0	0	1	14	0	1
Marywood College	119	0	0	3	0	116	0	0
Millersville University of Pennsylvania	124	2	0	3	2	114	0	3
Pennsylvania State University	4,419	92	13	147	53	2,805	7	1,302
Phila College of Osteopathic Medicine	0	0	0	0	0	0	0	0
Philadelphia Coll of Pharmacy and Sci	60	0	0	1	0	42	0	17
Shippensburg University of Pennsylvania	336	9	2	8	4	292	0	21
Slippery Rock University of Pennsylvania	190	3	0	1	0	186	0	0
St Joseph's University	461	31	0	14	3	325	2	86
Swarthmore College	0	0	0	0	0	0	0	0
Temple University	1,592	91	8	74	39	943	12	425
The Medical College of Pennsylvania	109	2	0	1	0	83	0	23
Thomas Jefferson University	269	2	1	9	1	199	5	52
University of Pennsylvania	2,533	60	0	101	34	1,440	1	897
University of Pittsburgh	3,944	81	12	86	29	2,819	19	898
University of Scranton	137	0	0	0	10	115	2	10
Villanova University	959	23	0	40	9	687	78	122
West Chester University of Pennsylvania	306	11	1	1	1	231	0	61
Widener University	133	2	0	9	4	79	0	39
Wilkes University	41	0	0	2	0	35	1	3
East North Central	83,758	2,980	181	2,849	1,277	52,286	1,950	22,235
Illinois	24,590	1,194	38	1,331	485	14,786	405	6,351
Bradley University	255	6	0	8	2	80	18	141
Chicago Coll of Osteo Medicine	0	0	0	0	0	0	0	0
Chicago School of Prof Psych	134	7	0	6	11	104	0	6
Chicago State University	176	103	0	0	19	45	2	7
De Paul University	1,489	134	1	232	55	961	4	102
Eastern Illinois University	176	2	0	0	2	147	0	25
Forest Institute of Prof Psych	206	6	2	3	2	193	0	0
Governors State University	618	168	1	3	19	415	7	5
Illinois Institute of Technology	1,818	65	1	120	42	858	86	646
Illinois State University	570	17	0	29	3	457	1	63
Loyola University of Chicago	755	23	1	29	19	571	0	112

See explanatory information, if any, and SOURCE(S) at end of table.

**Table E-4. Graduate students in the science, engineering, and health fields in all institutions, by geographic division, State, institution, and citizenship and racial/ethnic background of U.S. citizens: 1991**

Page 4 of 11

Division, State, and institution	Total	U.S. citizens						Non-U.S.
		Black non-Hispanic	American Indian/Alaskan Native	Asian/Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Illinois, continued								
Northeastern Illinois University	550	19	1	45	18	407	50	10
Northern Illinois University	1,231	25	3	15	14	827	0	347
Northwestern University	2,007	59	3	106	33	1,174	7	625
Roosevelt University	337	73	0	7	10	181	31	35
Rush University	479	17	0	16	2	415	6	23
Sangamon State University	764	48	0	11	13	637	8	47
Southern Illinois Univ at Carbondale	1,618	70	4	22	16	1,012	1	493
Southern Illinois Univ at Edwardsville	677	44	0	32	5	533	2	61
University of Chicago	1,830	38	4	77	49	939	0	723
University of Health Sciences (Chicago)	131	2	0	8	1	87	1	32
University of Illinois at Chicago	3,355	176	12	241	86	1,756	70	1,014
University of Illinois at Urbana	4,938	81	3	312	59	2,687	98	1,696
Western Illinois University	476	11	0	9	5	300	13	138
Indiana	10,111	229	8	240	122	6,607	166	2,739
Ball State University	429	9	0	0	2	324	5	89
Butler University	20	0	0	0	0	20	0	0
Indiana State University	372	16	0	5	0	242	6	103
Indiana University	4,135	111	3	98	42	3,140	26	715
Indiana Wesleyan University	23	0	0	0	0	21	0	2
Purdue University	4,022	75	4	117	51	2,235	33	1,507
Rose-Hulman Institute of Technology	120	0	0	0	0	0	92	28
Saint Francis College	46	1	0	0	0	45	0	0
University of Evansville	60	1	1	1	0	55	1	1
University of Notre Dame	822	12	0	19	24	470	3	294
Valparaiso University	62	4	0	0	3	55	0	0
Michigan	17,055	767	47	607	250	10,062	460	4,862
Andrews University	283	29	2	11	11	170	0	80
Central Michigan University	335	9	2	6	3	271	6	38
Eastern Michigan University	987	37	1	24	11	582	46	286
Grand Valley State University	232	11	1	6	1	212	1	0
Michigan State University	3,103	102	9	48	51	1,601	37	1,255
Michigan Technological University	483	3	3	9	5	256	9	198
Northern Michigan University	215	0	9	0	1	193	2	10
Oakland University	750	34	0	103	3	542	37	31
University of Detroit	668	72	1	27	6	397	3	162
University of Michigan	5,252	210	10	200	132	3,106	127	1,467
Wayne State University	3,056	174	2	149	15	1,570	177	969
Western Michigan University	1,691	86	7	24	11	1,162	15	386
Ohio	21,944	641	51	449	273	13,845	910	5,775
Air Force Institute of Technology	589	9	0	0	0	382	178	22
Antioch University	1,593	26	4	11	27	1,495	5	25
Bowling Green State University	600	37	1	9	18	372	12	151
Case Western Reserve University	1,669	31	9	51	16	953	71	538
Cleveland State University	1,179	56	0	85	10	777	16	235
John Carroll University	51	0	0	0	1	38	0	12
Kent State University	1,059	24	1	5	4	795	2	228
Medical College of Ohio at Toledo	290	2	0	1	1	206	0	80
Miami University	485	6	1	12	3	410	1	52
NE Ohio Univ Med School	0	0	0	0	0	0	0	0
Ohio State University	5,439	152	14	111	80	3,104	45	1,933
Ohio University	1,014	7	6	4	3	490	0	504
Union Institute	556	16	3	11	28	440	8	50
University of Akron	1,609	107	4	27	15	960	12	484
University of Cincinnati	2,721	80	3	45	34	1,629	82	848
University of Dayton	896	18	1	17	12	353	473	22
University of Toledo	751	17	1	10	6	355	4	358
Wright State University	1,144	49	3	48	14	830	3	197
Xavier University	113	0	0	0	0	113	0	0
Youngstown State University	186	4	0	2	1	143	0	36
Wisconsin	10,058	149	37	222	147	6,966	9	2,508
Marquette University	808	15	0	15	10	512	2	254
Medical College of Wisconsin	102	2	0	11	2	61	2	24
Milwaukee School of Engineering	349	10	1	12	6	315	0	5
University of Wisconsin - Eau Claire	122	5	3	0	1	112	0	1

See explanatory information, if any, and SOURCE(S) at end of table.

**Table E-4. Graduate students in the science, engineering, and health fields in all institutions, by geographic division, State, institution, and citizenship and racial/ethnic background of U.S. citizens: 1991**

Page 5 of 11

Division, State, and Institution	Total	U.S. citizens						Non-U.S.
		Black non-Hispanic	American Indian/Alaskan Native	Asian/Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
<b>Wisconsin, continued</b>								
University of Wisconsin - Green Bay	45	0	0	0	1	37	0	7
University of Wisconsin - La Crosse	81	0	0	1	0	78	0	2
University of Wisconsin - Madison	5,914	44	16	148	85	3,766	0	1,855
University of Wisconsin - Milwaukee	1,827	55	12	29	38	1,383	5	305
University of Wisconsin - Oshkosh	299	9	2	3	2	273	0	10
University of Wisconsin - Platteville	23	0	0	0	0	19	0	4
University of Wisconsin - River Falls	55	0	0	0	0	49	0	6
University of Wisconsin - Stevens Point	111	1	0	0	1	106	0	3
University of Wisconsin - Stout	246	7	2	3	0	202	0	32
University of Wisconsin - Whitewater	76	1	1	0	1	73	0	0
<b>West North Central</b>	<b>30,873</b>	<b>479</b>	<b>58</b>	<b>818</b>	<b>270</b>	<b>19,446</b>	<b>1,217</b>	<b>8,585</b>
<b>Iowa</b>	<b>5,740</b>	<b>84</b>	<b>3</b>	<b>55</b>	<b>37</b>	<b>3,114</b>	<b>229</b>	<b>2,218</b>
Drake University	172	6	0	1	2	160	0	3
Iowa State University of Sci & Tech	2,818	30	3	11	12	1,305	223	1,234
Loras College	23	0	0	0	0	23	0	0
Maharishi International University	78	2	0	0	0	39	0	37
Teikyo Marycrest College	38	0	0	0	0	23	0	15
Univ. of Osteopathic Med & Health Sci	74	1	0	0	0	73	0	0
University of Iowa	2,420	42	0	43	23	1,383	5	924
University of Northern Iowa	117	3	0	0	0	108	1	5
<b>Kansas</b>	<b>5,478</b>	<b>67</b>	<b>14</b>	<b>118</b>	<b>74</b>	<b>3,275</b>	<b>442</b>	<b>1,488</b>
Emporia State University - Kansas	129	0	0	0	1	29	22	18
Fort Hays State University	95	0	1	3	3	88	0	0
Kansas State University	1,532	15	2	11	29	835	1	639
Pittsburg State University	342	5	4	30	5	232	27	39
University of Kansas	2,403	21	4	40	20	1,337	388	593
Washburn University of Topeka	32	0	0	0	1	31	0	0
Wichita State University	945	26	3	34	15	664	4	199
<b>Minnesota</b>	<b>7,398</b>	<b>78</b>	<b>8</b>	<b>180</b>	<b>40</b>	<b>4,913</b>	<b>395</b>	<b>1,784</b>
Bemidji State University	20	0	2	0	0	17	0	1
Mankato State University	346	10	1	8	3	228	0	96
Mayo Graduate School	120	0	0	0	0	101	0	19
Moorhead State University	184	0	0	2	0	123	0	59
St Mary's College of Minnesota	938	8	2	4	3	771	150	0
St. Cloud State University	70	0	0	1	1	68	0	0
University of Minnesota	5,720	60	3	165	33	3,605	245	1,609
<b>Missouri</b>	<b>7,421</b>	<b>193</b>	<b>15</b>	<b>180</b>	<b>84</b>	<b>4,912</b>	<b>84</b>	<b>1,953</b>
Central Missouri State University	362	28	1	5	1	294	0	33
Kirkville College of Osteopathic Med	0	0	0	0	0	0	0	0
Lincoln University	32	7	0	0	0	20	0	5
Northeast Missouri State University	28	0	0	2	0	24	0	2
Northwest Missouri State University	44	0	0	0	0	43	0	1
Southeast Missouri State University	43	0	0	1	0	41	0	1
Southwest Missouri State University	217	0	2	2	1	186	20	6
St. Louis University	870	42	0	22	18	710	0	78
Univ of Health Sciences (Kansas City)	0	0	0	0	0	0	0	0
University of Missouri - Columbia	1,983	50	3	30	20	1,065	7	808
University of Missouri - Kansas City	790	19	5	23	12	535	13	183
University of Missouri - Rolla	1,261	8	1	45	8	750	5	444
University of Missouri - St Louis	281	14	1	7	12	192	8	47
Washington University	1,510	25	2	43	12	1,052	31	345
<b>Nebraska</b>	<b>2,781</b>	<b>37</b>	<b>5</b>	<b>107</b>	<b>22</b>	<b>1,944</b>	<b>43</b>	<b>623</b>
Creighton University	116	1	0	0	2	98	0	15
Kearney State College	46	0	0	0	0	45	1	0
University of Nebraska - Lincoln	1,756	17	3	75	12	1,077	6	566
University of Nebraska - Omaha	591	16	2	20	7	510	36	0

See explanatory information, if any, and SOURCE(S) at end of table.



**Table E-4. Graduate students in the science, engineering, and health fields in all institutions, by geographic division, State, institution, and citizenship and racial/ethnic background of U.S. citizens: 1991**

Page 6 of 11

Division, State, and institution	Total	U.S. citizens						Non-U.S.
		Black non-Hispanic	American Indian/Alaskan Native	Asian/Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Nebraska, continued								
University of Nebraska Medical Center	272	3	0	12	1	214	0	42
North Dakota	916	10	6	55	11	601	8	225
North Dakota State University	615	8	4	40	10	352	8	193
University of North Dakota	301	2	2	15	1	249	0	32
South Dakota	1,139	10	7	123	2	687	16	294
South Dakota School of Mines and Tech	274	0	0	75	0	83	0	116
South Dakota State University	629	3	3	37	1	419	5	161
University of South Dakota	236	7	4	11	1	185	11	17
South Atlantic	71,967	4,388	145	2,314	1,582	47,181	1,045	15,312
Delaware	1,470	59	1	32	5	913	26	434
Delaware State College	23	8	0	0	0	11	0	4
University of Delaware	1,447	51	1	32	5	902	26	430
District of Columbia	8,729	840	28	356	183	4,708	499	2,106
Catholic University of America	883	48	4	84	16	631	4	96
Gallaudet University	25	1	0	0	0	24	0	0
George Washington University	4,544	188	17	160	95	2,531	439	1,114
Georgetown University	750	7	0	40	14	497	6	186
Howard University	778	451	0	25	1	7	2	292
The American University	1,656	96	7	45	50	1,009	33	416
University of the District of Columbia	93	58	0	2	7	9	15	2
Florida	14,600	697	37	361	812	9,390	166	3,137
Florida A & M University	182	119	0	21	7	30	3	2
Florida Atlantic University	860	18	0	14	28	449	0	351
Florida Institute of Technology	1,028	13	2	17	30	650	0	276
Florida International University	893	107	0	34	231	365	0	156
Florida State University	1,503	89	9	35	40	988	3	339
Jacksonville University	26	1	0	3	0	22	0	0
Nova University	940	40	5	10	53	777	16	39
University of Central Florida	1,403	32	2	44	41	1,123	14	147
University of Florida	3,741	112	13	74	104	2,239	32	1,167
University of Miami	1,289	51	0	48	143	663	2	382
University of South Florida	2,334	91	3	57	125	1,698	96	264
University of West Florida	401	24	3	4	10	346	0	14
Georgia	8,701	810	10	265	152	5,608	49	1,807
Augusta College	49	6	0	1	0	41	0	1
Clark Atlanta University	282	183	0	1	1	2	0	95
Emory University	986	65	1	28	10	714	12	156
Fort Valley State College	73	47	0	0	0	25	1	0
Georgia College	262	30	0	4	5	220	0	3
Georgia Institute of Technology	3,326	180	4	129	89	1,963	0	961
Georgia Southern University	135	22	0	0	5	107	0	1
Georgia State University	1,149	151	1	56	17	820	30	74
Institute of Paper Science & Technology	70	2	0	2	0	60	0	6
Medical College of Georgia	200	19	0	5	5	139	1	31
Mercer University	116	8	0	0	1	106	0	1
Morehouse School of Medicine	0	0	0	0	0	0	0	0
University of Georgia	1,666	42	4	39	16	1,089	5	471
Valdosta State College	266	46	0	0	0	217	0	3
West Georgia College	121	9	0	0	3	105	0	4
Maryland	10,241	611	13	419	130	6,404	144	2,520
Coppin State College	31	28	0	0	0	0	0	3
Frostburg State University	64	1	2	0	2	56	1	2
Hood College	391	10	1	28	6	320	26	0
Johns Hopkins University	1,880	44	0	119	31	1,095	25	566
Loyola College	806	45	0	16	8	685	35	17
Morgan State University	57	41	0	2	0	3	1	10
Towson State University	500	49	1	10	3	429	0	8
Uniformed Serv Univ of the Hlth Science	118	1	2	7	1	75	0	32
University of Baltimore	272	77	0	2	6	180	3	4
University of Maryland - Balt Prof Sch	1,069	64	1	31	12	812	1	148
University of Maryland - Baltimore Cnty	1,026	56	0	26	9	666	4	265
University of Maryland - College Park	3,876	170	6	178	51	2,008	47	1,416
University of Maryland Eastern Shore	104	20	0	0	0	34	1	49
Washington College	47	5	0	0	1	41	0	0
North Carolina	10,282	561	33	316	107	7,278	24	1,963
Appalachian State University	242	14	2	11	1	211	1	2
Duke University	1,412	30	1	30	19	1,020	2	310
East Carolina University	402	24	3	1	2	333	9	30
North Carolina A & T State University	253	104	0	11	1	34	9	94

**Table E-4. Graduate students in the science, engineering, and health fields in all institutions, by geographic division, State, institution, and citizenship and racial/ethnic background of U.S. citizens: 1991**

Page 7 of 11

Division, State, and institution	Total	U.S. citizens						Non-U.S.
		Black non-Hispanic	American Indian/Alaskan Native	Asian/Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
North Carolina, continued								
North Carolina Central University	76	62	0	3	0	11	0	0
*North Carolina State Univ at Raleigh	3,115	122	7	94	21	1,995	0	876
Univ of North Carolina at Chapel Hill	3,101	130	13	115	44	2,329	0	470
Univ of North Carolina at Charlotte	650	30	1	37	4	449	0	129
Univ of North Carolina at Greensboro	585	40	5	7	11	507	0	15
University of North Carolina/Wilmington	74	0	1	3	2	68	0	0
Wake Forest University	241	4	0	3	1	200	3	30
Western Carolina University	131	1	0	1	1	121	0	7
South Carolina	3,993	150	4	65	31	2,580	49	1,114
Clemson University	1,795	39	0	16	8	1,067	37	628
College of Charleston	67	5	1	2	1	58	0	0
Furman University	7	1	0	0	0	6	0	0
Medical University of South Carolina	167	2	0	14	0	102	1	48
University of South Carolina	1,892	100	3	32	22	1,287	11	437
Winthrop College	65	3	0	1	0	60	0	1
Virginia	11,588	607	18	465	139	8,474	88	1,797
College of William and Mary	371	16	0	6	5	270	1	73
Eastern Virginia Medical School	118	15	0	0	2	78	4	19
George Mason University	2,299	83	6	170	40	1,747	0	253
Hampton University	110	65	1	17	0	15	11	1
Hollins College	5	0	0	0	0	3	2	0
Institute of Textile Technology	30	2	0	0	0	28	0	0
James Madison University	159	9	1	1	2	140	0	6
Old Dominion University	1,267	70	2	51	14	903	6	221
Radford University	228	11	1	2	1	209	0	4
University of Richmond	28	2	0	0	0	26	0	0
University of Virginia	1,943	83	2	61	29	1,522	16	230
Virginia Commonwealth University	1,853	140	4	24	12	1,511	7	155
Virginia Polytechnic Inst and State Uni	3,113	71	1	132	34	2,002	41	832
Virginia State University	64	40	0	1	0	20	0	3
West Virginia	2,363	44	1	35	23	1,826	0	434
Marshall University	261	6	1	4	13	213	0	24
Univ of West Virginia Coll of Grad Stds	443	12	0	10	4	417	0	0
University of Charleston	1	0	0	0	0	1	0	0
West Virginia Institute of Technology	15	0	0	0	0	6	0	9
West Virginia Sch of Osteopathic Med	0	0	0	0	0	0	0	0
West Virginia University	1,643	26	0	21	6	1,189	0	401
East South Central	20,271	1,326	48	544	148	13,408	322	4,475
Alabama	6,486	468	10	168	54	4,087	6	1,693
Alabama A & M University	254	90	0	15	2	24	0	123
Alabama State University	10	7	0	1	0	2	0	0
Auburn University	1,844	77	5	16	18	1,176	0	552
Jacksonville State University	151	41	0	0	1	106	0	3
The University of Alabama	901	29	0	28	5	501	2	336
The University of Alabama at Birmingham	1,446	100	1	33	12	978	2	320
The University of Alabama in Huntsville	1,051	21	1	45	8	758	2	216
Troy State University in Montgomery	169	14	0	1	3	151	0	0
Tuskegee University	116	41	0	18	0	1	0	56
University of Montevallo	29	0	0	0	0	29	0	0
University of South Alabama	515	48	3	11	5	361	0	87
Kentucky	4,119	112	9	100	29	3,017	110	742
Eastern Kentucky University	171	4	0	0	0	149	2	16
Morehead State University	69	1	0	0	0	65	3	0
Murray State University	356	11	0	0	0	307	0	38
Spalding University	140	4	1	0	0	121	12	2
University of Kentucky	2,019	38	4	34	16	1,344	93	490
University of Louisville	1,156	45	4	59	10	870	0	168
Western Kentucky University	208	9	0	7	3	161	0	28
Mississippi	2,847	346	8	127	23	1,478	28	837
Jackson State University	269	180	1	48	4	27	0	9
Mississippi State University	1,161	47	3	42	15	567	8	479
Mississippi University for Women	28	6	0	0	0	21	0	1
University of Mississippi	805	82	4	17	2	412	6	282
University of Southern Mississippi	584	31	0	20	2	451	14	66
Tennessee	6,819	400	21	149	42	4,826	178	1,203
Austin Peay State University	37	1	0	0	1	34	1	0
East Tennessee State University	390	15	0	1	3	318	15	38
Fisk University	29	22	0	0	0	3	0	4

See explanatory information, if any, and SOURCE(S) at end of table.

**Table E-4. Graduate students in the science, engineering, and health fields in all institutions, by geographic division, State, institution, and citizenship and racial/ethnic background of U.S. citizens: 1991**

Page 8 of 11

Division, State, and institution	Total	U.S. citizens						Non-U.S.
		Black non-Hispanic	American Indian/Alaskan Native	Asian/Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Tennessee, continued								
Meharry Medical College	54	44	0	1	1	0	0	8
Memphis State University	952	75	2	29	4	573	158	111
Middle Tennessee State University	529	25	0	23	5	471	0	5
Tennessee State University	226	68	0	8	0	109	0	41
Tennessee Technological University	323	12	1	0	1	201	0	108
University of Tennessee at Chattanooga	261	20	5	15	2	189	0	30
University of Tennessee at Knoxville	2,789	78	10	40	18	2,131	0	512
University of Tennessee, Memphis	213	15	0	12	0	138	0	48
Vanderbilt University	1,016	25	3	20	7	659	4	298
West South Central	45,631	1,630	212	1,968	1,683	27,033	652	12,453
Arkansas								
Arkansas State University	357	38	0	2	0	294	0	23
University of Arkansas	1,269	22	6	7	7	633	325	269
University of Arkansas - Med Sci Campus	226	11	0	1	0	168	3	23
University of Arkansas at Little Rock	183	22	0	3	1	148	0	9
University of Central Arkansas	277	27	0	1	1	222	26	0
Louisiana	5,921	397	7	228	70	3,076	102	2,041
Grambling State University	9	9	0	0	0	0	0	0
Louisiana State University System	2,848	100	3	112	34	1,496	39	1,064
Louisiana Tech University	301	3	0	28	2	142	0	126
Loyola University in New Orleans	2	0	0	0	0	2	0	0
McNeese State University	142	4	0	3	0	97	6	32
Nicholls State University	40	0	0	0	0	40	0	0
Northeast Louisiana University	200	12	0	61	1	121	5	0
Northwest State University	161	24	0	2	3	131	1	0
Southeastern Louisiana University	32	2	0	0	0	27	0	3
Southern University A & M College	212	165	0	0	0	9	32	6
Tulane University of Louisiana	1,232	37	4	9	24	687	17	454
Tulane University of Southwestern Louisiana	607	18	0	6	0	229	0	354
Xavier University	135	23	0	7	6	95	2	2
Oklahoma	4,849	118	134	87	60	2,759	49	1,642
East Central University	8	0	0	0	0	8	0	0
Northeastern State University	204	12	23	1	2	161	0	5
Oklahoma State University	1,813	31	25	37	20	955	8	737
Southwestern Oklahoma State University	15	0	3	1	1	10	0	0
University of Oklahoma	2,529	70	79	42	30	1,473	40	795
University of Tulsa	280	5	4	6	7	152	1	105
Texas	32,549	995	65	1,639	1,544	19,713	147	8,446
Abilene Christian University	102	0	1	1	2	98	0	0
Angelo State University	123	2	1	0	12	107	0	1
Baylor College of Dentistry	48	1	0	3	6	36	0	2
Baylor College of Medicine	303	1	1	11	5	179	0	106
Baylor University	504	16	1	17	20	409	3	38
Corpus Christi State University	189	4	0	4	23	158	0	0
East Texas State University	346	5	0	7	3	226	0	105
Incarnate Word College	140	13	0	2	31	94	0	0
Lamar University	512	13	0	53	17	136	5	288
Midwestern State University	142	16	0	4	6	107	0	9
Prairie View A & M University	143	78	0	14	3	8	0	40
Rice University	825	10	1	27	14	444	1	328
Sam Houston State University	362	12	1	12	8	240	5	84
Southern Methodist University	815	16	0	81	17	536	0	165
Southwest Texas State University	710	24	2	48	64	514	0	58
St Mary's University of San Antonio	45	0	0	4	11	27	0	3
Stephen F. Austin State University	201	3	0	6	5	177	0	10
Sul Ross State University	43	1	0	0	6	32	0	4
Tarleton State University	47	2	0	0	3	40	0	2
Texas A & I University	351	2	0	3	78	97	0	171
Texas A & M University	5,009	68	12	95	198	2,750	11	1,875
Texas Christian University	143	4	0	1	7	112	0	19
Texas College of Osteopathic Medicine	89	0	0	23	3	33	0	30
Texas Southern University	240	123	0	19	5	5	0	84
Texas Tech University	1,464	10	3	9	41	895	4	502
Texas Woman's University	1,609	99	1	42	61	1,359	8	39
The University of Texas - Pan American	12	0	0	0	7	5	0	0

See explanatory information, if any, and SOURCE(S) at end of table.

**Table E-4. Graduate students in the science, engineering, and health fields in all institutions, by geographic division, State, institution, and citizenship and racial/ethnic background of U.S. citizens: 1991**

Page 9 of 11

Division, State, and institution	Total	U.S. citizens						Non-U.S.
		Black non-Hispanic	American Indian/Alaskan Native	Asian/Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
<b>Texas, continued</b>								
Trinity University	118	6	1	0	15	91	1	4
Univ of Texas Hlth Sci Ctr San Antonio	500	7	1	24	34	396	0	38
Univ of Texas Hlth Sci Ctr at Houston	962	59	4	43	66	613	0	177
Univ of Texas MD Anderson Cancer Center	0	0	0	0	0	0	0	0
Univ of Texas Med Branch at Galveston	355	14	0	27	15	222	0	77
Univ of Texas SW Medical Ctr at Dallas	355	3	1	15	7	261	0	68
Univ of Texas at Arlington	2,087	29	5	162	42	1,207	0	649
Univ of Texas at Austin	4,971	37	9	71	152	2,782	33	1,887
Univ of Texas at Dallas	1,195	36	2	84	31	753	0	289
Univ of Texas at El Paso	799	20	0	23	226	275	9	246
University of Central Texas	197	57	1	2	11	121	0	5
University of Houston - Victoria	27	0	0	0	2	25	0	0
University of Houston at Clear Lake Ctr	1,287	58	2	118	63	965	3	78
University of Houston-University Park	3,209	106	14	550	135	1,740	57	607
University of North Texas	1,152	19	1	16	21	825	6	264
University of Texas at San Antonio	310	3	0	15	60	205	0	27
University of Texas at Tyler	220	14	0	0	3	157	0	46
University of Texas of the Permian Basin	57	2	0	0	0	55	0	0
West Texas State University	231	2	0	3	5	203	1	17
<b>Mountain</b>	<b>29,434</b>	<b>285</b>	<b>187</b>	<b>711</b>	<b>895</b>	<b>20,145</b>	<b>665</b>	<b>6,546</b>
<b>Arizona</b>	<b>7,648</b>	<b>83</b>	<b>62</b>	<b>143</b>	<b>281</b>	<b>4,755</b>	<b>25</b>	<b>2,299</b>
Arizona State University	3,318	35	18	58	117	1,884	16	1,190
Northern Arizona University	939	23	25	8	59	785	3	36
University of Arizona	3,391	25	19	77	105	2,086	6	1,073
<b>Colorado</b>	<b>9,350</b>	<b>137</b>	<b>40</b>	<b>313</b>	<b>234</b>	<b>7,060</b>	<b>191</b>	<b>1,375</b>
Colorado School of Mines	781	5	1	3	11	590	40	131
Colorado State University	2,010	17	10	50	36	1,418	0	479
National Technological University	657	9	4	60	12	529	30	13
University of Colorado	4,544	71	21	170	127	3,523	75	557
University of Denver	991	28	3	23	38	707	26	166
University of Northern Colorado	367	7	1	7	10	293	20	29
<b>Idaho</b>	<b>1,512</b>	<b>6</b>	<b>5</b>	<b>36</b>	<b>19</b>	<b>1,152</b>	<b>5</b>	<b>289</b>
Idaho State University	444	2	2	8	4	398	2	28
University of Idaho	1,068	4	3	28	15	754	3	261
<b>Montana</b>	<b>1,137</b>	<b>2</b>	<b>7</b>	<b>19</b>	<b>7</b>	<b>893</b>	<b>7</b>	<b>202</b>
Montana College Mineral Sci & Technolog	91	1	0	0	2	75	0	13
Montana State University	521	1	3	7	2	382	7	119
University of Montana	525	0	4	12	3	436	0	70
<b>Nevada</b>	<b>1,296</b>	<b>16</b>	<b>3</b>	<b>43</b>	<b>21</b>	<b>853</b>	<b>117</b>	<b>243</b>
University of Nevada at Las Vegas	425	11	1	17	7	331	21	37
University of Nevada at Reno	871	5	2	26	14	522	96	206
<b>New Mexico</b>	<b>3,176</b>	<b>29</b>	<b>37</b>	<b>39</b>	<b>299</b>	<b>2,052</b>	<b>37</b>	<b>683</b>
Eastern New Mexico University	103	5	1	0	16	70	0	11
New Mexico Highlands University	54	1	1	0	15	20	8	9
New Mexico Institute of Mining and Tech	253	0	1	0	9	112	0	131
New Mexico State University	956	12	7	13	98	587	10	229
University of New Mexico	1,810	11	27	26	161	1,263	19	303
<b>Utah</b>	<b>4,286</b>	<b>10</b>	<b>16</b>	<b>96</b>	<b>26</b>	<b>2,753</b>	<b>123</b>	<b>1,262</b>
Brigham Young University	1,013	3	0	0	0	801	37	172
University of Utah	2,025	3	1	66	18	1,285	69	583
Utah State University	1,248	4	15	30	8	667	17	507
<b>Wyoming</b>	<b>1,029</b>	<b>2</b>	<b>17</b>	<b>22</b>	<b>8</b>	<b>627</b>	<b>160</b>	<b>193</b>
University of Wyoming	1,029	2	17	22	8	627	160	193
<b>Pacific</b>	<b>73,975</b>	<b>1,881</b>	<b>363</b>	<b>5,999</b>	<b>2,677</b>	<b>42,891</b>	<b>5,067</b>	<b>15,097</b>
<b>Alaska</b>	<b>690</b>	<b>5</b>	<b>3</b>	<b>17</b>	<b>5</b>	<b>508</b>	<b>37</b>	<b>115</b>
University of Alaska Southeast	26	0	0	0	0	26	0	0
University of Alaska at Anchorage	184	4	1	4	1	174	0	0
University of Alaska at Fairbanks	480	1	2	13	4	308	37	115
<b>California</b>	<b>60,097</b>	<b>1,739</b>	<b>294</b>	<b>5,205</b>	<b>2,504</b>	<b>34,205</b>	<b>4,722</b>	<b>11,428</b>
Azusa Pacific University	269	11	2	26	5	118	1	106
Biola University	188	4	2	7	6	159	0	10
Calif Poly State Univ at San Luis Obispo	404	6	0	38	12	259	44	45

See explanatory information, if any, and SOURCE(S) at end of table.

**Table E-4. Graduate students in the science, engineering, and health fields in all institutions, by geographic division, State, institution, and citizenship and racial/ethnic background of U.S. citizens: 1991**

Page 10 of 11

Division, State, and institution	Total	U.S. citizens						Non-U.S.
		Black non-Hispanic	American Indian/Alaskan Native	Asian/Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
California, continued								
Calif Sch of Prof Psych - Fresno	366	15	3	14	21	276	21	16
Calif Sch of Prof Psych - Los Angeles	534	48	6	28	46	362	7	37
Calif Sch of Prof Psych - San Diego	617	11	3	5	44	518	36	0
Calif Sch of Prof Psych-Berkeley/Alamed	519	23	2	23	16	409	9	37
Calif State Polytechnic Univ at Pomona	417	8	3	67	21	218	41	59
Calif State Univ at Dominguez Hills	486	148	0	23	46	208	44	17
Calif State Univ at Fullerton	1,125	24	5	129	54	565	100	248
Calif State Univ at Hayward	906	66	8	81	47	560	104	40
Calif State Univ at Long Beach	2,236	88	15	295	127	1,180	168	363
Calif State Univ at Los Angeles	1,114	114	5	156	169	435	114	121
Calif State Univ at San Bernardino	218	11	0	7	17	145	22	16
Calif State Univ of Stanislaus	153	0	0	0	0	0	153	0
Calif State University at Chico	504	9	4	17	17	363	27	67
Calif State University at Fresno	816	17	7	84	51	490	110	57
Calif State University at Northridge	1,680	36	1	150	77	1,007	259	150
Calif State University at Sacramento	896	13	6	68	20	541	85	163
California Institute of Integral Studie	362	0	0	0	0	0	362	0
California Institute of Technology	1,125	3	0	64	8	552	9	489
California State Univ - Bakersfield	182	12	3	8	27	111	19	2
Chapman University	199	5	0	4	16	171	0	3
Charles R. Drew Univ of Medicine & Sci	0	0	0	0	0	0	0	0
Claremont Univ Center & Graduate School	552	5	41	6	6	402	0	92
Dominican College of San Rafael	109	1	1	4	4	63	1	35
Fuller Theological Seminary	343	9	0	24	10	261	0	39
Golden Gate University	192	29	1	12	8	127	9	6
Harvey Mudd College	6	0	0	1	0	5	0	0
Humboldt State University	330	3	15	9	11	278	2	12
John F Kennedy University	850	23	8	22	30	736	31	0
Loma Linda University	468	17	3	34	9	277	6	122
Loyola Marymount University	207	6	1	25	13	102	44	16
National University	767	54	2	61	47	517	48	38
Occidental College	1	0	0	0	0	0	1	0
Pacific Grad School of Prof Psych	341	8	5	9	9	310	0	0
Pacific States University	25	0	0	0	0	0	0	25
Pepperdine University	935	49	4	35	53	711	43	40
Rand Graduate School of Policy Studies	60	1	0	2	0	47	0	10
San Diego State University	2,168	61	6	132	119	1,621	118	109
San Francisco State University	1,292	34	5	136	46	700	169	202
San Jose State University	2,151	49	12	477	72	918	221	402
Santa Clara University	1,222	7	1	201	9	515	81	408
Sonoma State University	226	3	4	1	12	167	31	8
Stanford University	4,422	92	17	441	148	2,515	44	1,165
The Fielding Institute	478	16	2	5	10	438	7	0
The Wnght Institute	199	9	0	9	6	161	5	9
US International University	492	24	4	10	31	394	0	29
US Naval Postgraduate School	1,340	0	0	0	0	0	1,181	159
University of Calif at Berkeley	4,979	147	20	396	197	2,833	93	1,293
University of Calif at Davis	2,579	43	8	146	81	1,663	69	569
University of Calif at Irvine	1,344	16	6	162	43	799	41	277
University of Calif at Los Angeles	4,171	98	22	504	196	1,970	238	1,143
University of Calif at Riverside	733	9	3	44	35	450	12	180
University of Calif at San Diego	1,902	23	8	154	61	1,069	102	485
University of Calif at San Francisco	1,034	23	3	87	46	777	8	90
University of Calif at Santa Barbara	1,530	25	5	83	48	976	19	374
University of Calif at Santa Cruz	628	17	2	42	47	377	47	96
University of La Verne	320	22	0	4	10	234	22	28
University of Redlands	51	4	1	1	2	39	4	0
University of San Diego	188	5	3	5	9	165	0	1
University of San Francisco	191	2	0	11	4	75	54	45
University of Southern California	5,575	127	5	608	223	2,762	62	1,768

See explanatory information, if any, and SOURCE(S) at end of table.



**Table E-4. Graduate students in the science, engineering, and health fields in all institutions, by geographic division, State, institution, and citizenship and racial/ethnic background of U.S. citizens: 1991**

Page 11 of 11

Division, State, and institution	Total	U.S. citizens						Non-U.S.
		Black non-Hispanic	American Indian/Alaskan Native	Asian/Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
California, continued								
University of the Pacific	154	6	1	8	2	104	5	28
West Coast University	228	0	0	0	0	0	169	59
Hawaii	2,092	12	13	368	12	863	30	794
University of Hawaii at Manoa	2,092	12	13	368	12	863	30	794
Oregon	4,181	38	15	126	45	2,423	136	1,398
Oregon Grad Inst of Science & Technolog	213	1	0	11	1	112	0	88
Oregon Health Sciences University	119	0	0	5	2	80	0	32
Oregon State University	1,861	8	5	42	16	999	35	756
Pacific University	9	0	0	1	1	5	0	2
Portland State University	1,051	25	8	49	11	661	79	218
Southern Oregon State College	50	0	0	0	0	49	0	1
University of Oregon	830	4	2	15	14	487	22	286
University of Portland	48	0	0	3	0	30	0	15
Washington	6,915	87	38	283	111	4,892	142	1,362
Central Washington University	132	0	1	2	3	125	1	0
Eastern Washington University	297	1	6	3	7	254	9	17
Gonzaga University	9	0	0	0	0	5	0	4
Pacific Lutheran University	81	1	0	1	2	75	0	2
Saint Martin's College	30	1	0	1	1	22	0	5
Seattle University	239	7	2	9	1	161	41	18
University of Washington	4,454	50	18	215	64	3,140	82	885
Walla Walla College	5	0	0	1	1	3	0	0
Washington State University	1,353	23	10	40	26	847	3	404
Western Washington University	300	4	1	11	6	245	6	27
Whitworth College	15	0	0	0	0	15	0	0
Outlying Areas	2,841	0	0	6	2,566	20	22	227
Guam	12	0	0	6	0	6	0	0
University of Guam	12	0	0	6	0	6	0	0
Puerto Rico	2,829	0	0	0	2,566	14	22	227
Caribbean Center for Advanced Studies	386	0	0	0	365	0	21	0
Catholic University of Puerto Rico	52	0	0	0	52	0	0	0
Ponce School of Medicine	15	0	0	0	15	0	0	0
University of Puerto Rico	439	0	0	0	254	9	0	176
University of Puerto Rico - Rio Piedras	1,213	0	0	0	1,160	4	0	49
University of Puerto Rico Med Sci Campu	724	0	0	0	720	1	1	2

NOTE: Includes medical schools

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

223

**Table F-1. Graduate science and engineering students by enrollment status and total postdoctoral appointees in doctorate-granting institutions, ranked by total graduate science and engineering students: 1991**

Page 1 of 6

Institutional ranking	Total students	Full-time students	Part-time students	Postdoctoral appointees
Total, all institutions	411,296	286,756	124,540	31,553
1 University of Wisconsin - Madison	5,914	5,161	753	502
2 University of Minnesota	5,720	4,808	912	416
3 University of Southern California	5,575	3,582	1,993	366
4 Ohio State University	5,439	4,688	751	295
5 University of Michigan	5,252	4,545	707	542
6 Texas A & M University	5,009	4,261	748	198
7 University of Calif at Berkeley	4,979	4,979	0	654
8 Univ of Texas at Austin	4,971	4,210	761	245
9 University of Illinois at Urbana	4,938	4,935	3	263
10 University of Colorado	4,544	3,372	1,172	319
Total, 1st 10 insts.	52,341	44,541	7,800	3,800
11 George Washington University	4,544	1,547	2,997	31
12 University of Washington	4,454	3,553	901	812
13 Stanford University	4,422	4,106	316	970
14 Pennsylvania State University	4,419	3,178	1,241	217
15 Rutgers the State University	4,375	2,283	2,092	220
16 Massachusetts Institute of Technology	4,243	4,187	56	430
17 University of Calif at Los Angeles	4,171	4,170	1	620
18 Indiana University	4,135	2,825	1,310	367
19 Purdue University	4,022	3,706	316	225
20 University of Pittsburgh	3,944	2,304	1,640	206
Total, 1st 20 insts.	95,070	76,400	18,670	7,898
21 University of Maryland - College Park	3,876	2,388	1,488	133
22 University of Florida	3,741	2,413	1,328	294
23 Harvard University	3,472	3,334	138	2,406
24 Cornell University	3,453	3,453	0	480
25 SUNY - Buffalo	3,445	2,317	1,128	339
26 University of Arizona	3,391	2,864	527	302
27 University of Illinois at Chicago	3,355	2,026	1,329	150
28 Georgia Institute of Technology	3,326	2,579	747	66
29 Arizona State University	3,318	1,895	1,423	85
30 New York University	3,315	1,557	1,758	184
Total, 1st 30 insts.	129,762	101,226	28,536	12,337
31 University of Massachusetts	3,262	1,500	1,762	225
32 University of Houston-University Park	3,209	1,293	1,916	30
33 North Carolina State Univ at Raleigh	3,115	2,509	606	192
34 Virginia Polytechnic Inst and State Uni	3,113	2,539	574	122
35 Michigan State University	3,103	2,610	493	176
36 Univ of North Carolina at Chapel Hill	3,101	2,691	410	392
37 Wayne State University	3,056	1,549	1,507	156
38 Columbia University Main Division	2,964	2,261	703	432
39 Louisiana State University System	2,848	2,272	576	256
40 Iowa State University of Sci & Tech	2,818	2,332	486	160
Total, 1st 40 insts.	160,351	122,782	37,569	14,478
41 University of Tennessee at Knoxville	2,789	1,623	1,166	137
42 University of Cincinnati	2,721	1,884	837	178
43 Boston University	2,631	1,809	822	39
44 Northeastern University	2,581	1,266	1,315	36
45 University of Calif at Davis	2,579	2,446	133	213
46 University of Connecticut	2,551	1,776	775	102
47 University of Pennsylvania	2,533	2,302	231	642
48 University of Oklahoma	2,529	1,569	960	93
49 University of Iowa	2,420	1,915	505	302
50 SUNY - Stony Brook	2,406	1,651	755	197
Total, 1st 50 insts.	186,091	141,023	45,068	16,417
51 University of Kansas	2,403	1,061	1,342	141
52 University of South Florida	2,334	1,156	1,178	46
53 George Mason University	2,299	493	1,806	0
54 San Diego State University	2,166	1,083	1,083	12
55 Syracuse University	2,164	1,200	964	47
56 University of Hawaii at Manoa	2,092	1,767	325	50
57 Univ of Texas at Arlington	2,087	950	1,137	36
58 University of Massachusetts Lowell	2,049	915	1,134	19
59 Rensselaer Polytechnic Institute	2,036	1,434	602	72
60 Columbia University Teachers College	2,030	828	1,202	0
Total, 1st 60 insts.	207,751	151,910	55,841	16,840

See explanatory information, if any, and SOURCE(S) at end of table.

224

**Table F-1. Graduate science and engineering students by enrollment status and total postdoctoral appointees in doctorate-granting institutions, ranked by total graduate science and engineering students: 1991**

Page 2 of 6

Institutional ranking	Total students	Full-time students	Part-time students	Postdoctoral appointees
61 University of Utah	2,025	1,550	475	165
62 University of Kentucky	2,019	1,567	452	242
63 Colorado State University	2,010	1,456	554	193
64 Northwestern University	2,007	1,903	104	258
65 University of Missouri - Columbia	1,983	1,316	667	98
66 University of Virginia	1,943	1,780	163	231
67 University of Calif at San Diego	1,902	1,743	159	653
68 University of South Carolina	1,892	1,232	660	57
69 Johns Hopkins University	1,880	1,627	253	766
70 Oregon State University	1,861	1,737	124	73
Total, 1st 70 Insts.	227,273	167,821	59,452	19,576
71 Yale University	1,861	1,758	103	897
72 Virginia Commonwealth University	1,853	1,168	685	138
73 New Jersey Institute of Technology	1,848	702	1,146	0
74 Auburn University	1,844	994	850	41
75 CUNY Graduate School and Univ Center	1,841	1,599	242	57
76 University of Chicago	1,830	1,830	0	455
77 University of Wisconsin - Milwaukee	1,827	1,018	809	28
78 Illinois Institute of Technology	1,818	557	1,261	16
79 Oklahoma State University	1,813	734	1,079	43
80 University of New Mexico	1,810	1,216	594	54
Total, 1st 80 Insts.	245,618	179,397	66,221	21,305
81 Clemson University	1,795	1,394	401	36
82 University of Nebraska - Lincoln	1,756	1,367	389	67
83 Western Michigan University	1,691	734	957	1
84 Case Western Reserve University	1,669	1,131	538	261
85 Polytechnic University	1,667	441	1,226	36
86 University of Georgia	1,666	1,486	180	150
87 Carnegie-Mellon University	1,656	1,260	396	84
88 The American University	1,656	939	717	2
89 West Virginia University	1,643	1,106	537	57
90 Southern Illinois Univ at Carbondale	1,618	1,267	351	30
Total, 1st 90 Insts.	262,435	190,522	71,913	22,029
91 Texas Woman's University	1,609	702	907	1
92 University of Akron	1,609	984	625	56
93 Antioch University	1,593	1,203	390	0
94 Temple University	1,592	1,214	378	78
95 Drexel University	1,566	523	1,043	36
96 Kansas State University	1,532	1,309	223	63
97 University of Calif at Santa Barbara	1,530	1,515	15	150
98 Washington University	1,510	1,179	331	488
99 Florida State University	1,503	1,093	410	72
100 De Paul University	1,489	589	900	0
Total, 1st 100 Insts.	277,968	200,833	77,135	22,973
101 Texas Tech University	1,464	1,084	380	45
102 University of Delaware	1,447	1,075	372	66
103 The University of Alabama at Birmingham	1,448	1,078	368	257
104 University of Rochester	1,422	1,270	152	261
105 Duke University	1,412	1,329	83	363
106 University of Central Florida	1,403	592	811	4
107 Long Island University	1,403	470	933	0
108 SUNY - Albany	1,384	891	493	29
109 Princeton University	1,374	1,374	0	258
110 Washington State University	1,353	1,181	172	120
Total, 1st 110 Insts.	292,076	211,177	80,899	24,376
111 University of Calif at Irvine	1,344	1,260	84	274
112 Stevens Institute of Technology	1,343	475	868	6
113 US Naval Postgraduate School	1,340	1,340	0	0
114 University of Rhode Island	1,339	883	456	28
115 University of Miami	1,289	996	293	127
116 University of Arkansas	1,269	745	524	31
117 Old Dominion University	1,267	589	678	6
118 CUNY City College	1,263	302	961	9
119 University of Missouri - Rolla	1,261	704	557	14
120 Utah State University	1,248	1,105	143	25
Total, 1st 120 Insts.	305,039	219,576	85,463	24,896

See explanatory information, if any, and SOURCE(S) at end of table.

225

**Table F-1. Graduate science and engineering students by enrollment status and total postdoctoral appointees in doctorate-granting institutions, ranked by total graduate science and engineering students: 1991**

Page 3 of 6

Institutional ranking	Total students	Full-time students	Part-time students	Postdoctoral appointees
121 Tulane University of Louisiana	1,232	1,003	229	44
122 Northern Illinois University	1,231	808	423	22
123 Santa Clara University	1,222	192	1,030	1
124 SUNY - Binghamton	1,214	686	528	13
125 University of Puerto Rico - Rio Piedras	1,213	824	389	6
126 Univ of Texas at Dallas	1,195	593	602	6
127 Cleveland State University	1,179	454	725	15
128 Mississippi State University	1,161	969	192	19
129 University of Louisville	1,156	583	573	25
130 University of North Texas	1,152	715	437	8
Total, 1st 130 insts.	316,994	226,403	90,591	25,055
131 Georgia State University	1,149	644	505	24
132 Pace University	1,144	104	1,040	0
133 Wright State University	1,144	500	644	18
134 California Institute of Technology	1,125	1,125	0	282
135 University of Maryland - Balt Prof Sch	1,069	518	551	83
136 University of Idaho	1,068	537	531	36
137 Kent State University	1,059	662	397	16
138 Portland State University	1,051	480	571	0
139 The University of Alabama in Huntsville	1,051	454	597	4
140 Tufts University	1,044	846	198	242
Total, 1st 140 insts.	327,898	232,273	95,625	25,760
141 University of Calif at San Francisco	1,034	1,010	24	929
142 University of Wyoming	1,029	791	238	24
143 Florida Institute of Technology	1,028	529	499	13
144 University of Maryland - Baltimore Cnty	1,026	566	460	24
145 Lehigh University	1,022	721	301	34
146 Vanderbilt University	1,016	953	63	242
147 Ohio University	1,014	895	119	18
148 Brigham Young University	1,013	493	520	49
149 Fairleigh Dickinson University	1,005	260	745	0
150 University of Denver	991	530	461	43
Total, 1st 150 insts.	338,076	239,021	99,055	27,136
151 Emory University	986	696	290	113
152 Univ of Texas Hlth Sci Ctr at Houston	962	557	405	0
153 Villanova University	959	246	713	0
154 New Mexico State University	956	695	261	23
155 Memphis State University	952	549	403	8
156 Wichita State University	945	335	610	0
157 Nova University	940	399	541	0
158 Northern Arizona University	939	549	390	1
159 The University of Alabama	901	762	139	28
160 University of Dayton	896	203	693	2
Total, 1st 160 insts.	347,512	244,012	103,500	27,311
161 Florida International University	893	334	559	4
162 New York Institute of Technology	887	364	523	0
163 Catholic University of America	883	223	660	24
164 Worcester Polytechnic Institute	882	367	515	12
165 University of Nevada at Reno	871	718	153	38
166 St. Louis University	870	423	447	55
167 Florida Atlantic University	860	381	479	0
168 New School for Social Research	848	416	432	0
169 University of Oregon	830	783	47	101
170 Rice University	825	779	46	101
Total, 1st 170 insts.	356,161	248,800	107,361	27,646
171 University of Notre Dame	822	785	37	61
172 Southern Methodist University	815	171	644	17
173 Marquette University	808	459	349	3
174 University of Mississippi	805	701	104	38
175 Univ of Texas at El Paso	799	445	354	9
176 Adelphi University	798	223	575	2
177 University of Missouri - Kansas City	790	286	504	15
178 Colorado School of Mines	781	444	337	4
179 Howard University	778	487	291	20
180 Brown University	761	728	33	90
Total, 1st 180 insts.	364,118	253,529	110,589	27,905

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-1. Graduate science and engineering students by enrollment status and total postdoctoral appointees in doctorate-granting institutions, ranked by total graduate science and engineering students: 1991**

Page 4 of 6

Institutional ranking	Total students	Full-time students	Part-time students	Postdoctoral appointees
181 Loyola University of Chicago	755	423	332	21
182 University of Toledo	751	481	270	28
183 Georgetown University	750	573	177	79
184 Oakland University	750	245	505	0
185 CUNY Hunter College	749	253	496	5
186 University of Calif at Riverside	733	722	11	130
187 University of Puerto Rico Med Sci Campus	724	516	208	0
188 University of Maine	711	567	144	11
189 St John's University	705	364	341	3
190 University of New Hampshire	697	573	124	4
Total, 1st 190 insts.	371,443	258,246	113,197	28,186
191 Boston College	678	456	222	13
192 University of Detroit	668	189	479	0
193 University of Vermont & St Agric Colleg	648	496	152	76
194 Yeshiva University	632	476	156	244
195 South Dakota State University	629	413	216	2
196 University of Calif at Santa Cruz	628	616	12	48
197 Calif Sch of Prof Psych - San Diego	617	379	238	0
198 North Dakota State University	615	509	106	25
199 University of Southwestern Louisiana	607	483	124	3
200 Bowling Green State University	600	482	118	20
Total, 1st 200 insts.	377,765	262,745	115,020	28,617
201 Fordham University	598	292	306	2
202 Air Force Institute of Technology	589	589	0	0
203 Univ of North Carolina at Greensboro	585	332	253	0
204 University of Southern Mississippi	584	407	177	5
205 Hahnemann University	572	454	118	26
206 Illinois State University	570	379	191	3
207 Union Institute	556	556	0	0
208 Claremont Univ Center & Graduate School	552	185	367	0
209 Seton Hall University	540	94	446	0
210 Calif Sch of Prof Psych - Los Angeles	534	471	63	0
Total, 1st 210 insts.	383,445	266,504	116,941	28,653
211 University of Montana	525	412	113	2
212 Montana State University	521	462	59	33
213 Calif Sch of Prof Psych-Berkeley/Alamed	519	444	75	0
214 University of South Alabama	515	287	228	20
215 Lamar University	512	387	125	5
216 Hofstra University	508	300	208	1
217 Baylor University	504	405	99	11
218 Univ of Texas Hlth Sci Ctr San Antonio	500	311	189	189
219 US International University	492	231	261	0
220 Miami University	485	436	49	16
Total, 1st 220 insts.	388,526	270,179	118,347	28,930
221 Michigan Technological University	483	460	23	0
222 University of Alaska at Fairbanks	480	329	151	3
223 Rush University	479	312	167	2
224 The Fielding Institute	478	478	0	0
225 Loma Linda University	468	271	197	40
226 Idaho State University	444	303	141	0
227 University of Puerto Rico	439	428	11	0
228 Ball State University	429	259	170	0
229 Brandeis University	428	425	3	89
230 SUNY - Coll of Env Science and Forestry	427	222	205	9
Total, 1st 230 insts.	393,081	273,666	119,415	29,100
231 East Carolina University	402	318	84	20
232 Duquesne University	401	218	183	0
233 East Tennessee State University	390	177	213	0
234 Caribbean Center for Advanced Studies	386	282	104	0
235 Indiana State University	372	257	115	1
236 College of William and Mary	371	316	55	11
237 University of Northern Colorado	367	250	117	0
238 Calif Sch of Prof Psych - Fresno	366	315	51	0
239 Sam Houston State University	362	194	168	0
240 California Institute of Integral Studie	362	159	203	0
Total, 1st 240 insts.	396,860	276,152	120,708	29,132

See explanatory information, if any, and SOURCE(S) at end of table.

227



**Table F-1. Graduate science and engineering students by enrollment status and total postdoctoral appointees in doctorate-granting institutions, ranked by total graduate science and engineering students: 1991**

Page 5 of 6

Institutional ranking	Total students	Full-time students	Part-time students	Postdoctoral appointees
241 Dartmouth College	362	358	4	77
242 Univ of Texas SW Medical Ctr at Dallas	355	354	1	342
243 Univ of Texas Med Branch at Galveston	355	258	97	101
244 East Texas State University	346	147	199	0
245 Fuller Theological Seminary	343	260	83	0
246 Pacific Grad School of Prof Psych	341	136	205	0
247 Central Michigan University	335	285	50	3
248 Tennessee Technological University	323	214	109	0
249 Baylor College of Medicine	303	303	0	253
250 Louisiana Tech University	301	231	70	0
Total, 1st 250 Insts.	400,224	278,698	121,526	29,908
251 University of North Dakota	301	248	53	4
252 Univ of Med and Dent of New Jersey	291	275	16	140
253 Medical College of Ohio at Toledo	290	138	152	54
254 Clarkson University	286	279	7	64
255 Andrews University	283	183	100	0
256 Clark Atlanta University	282	200	82	8
257 University of Missouri - St Louis	281	195	86	19
258 University of Tulsa	280	197	83	0
259 Clark University	275	243	32	8
260 South Dakota School of Mines and Tech	274	257	17	2
Total, 1st 260 Insts.	403,067	280,913	122,154	30,207
261 University of Nebraska Medical Center	272	115	157	42
262 Thomas Jefferson University	269	196	73	178
263 Marshall University	261	149	112	2
264 New Mexico Institute of Mining and Tech	253	252	1	0
265 Wake Forest University	241	212	29	65
266 University of South Dakota	236	181	55	0
267 University of Arkansas - Med Sci Campus	226	94	132	13
268 Oregon Grad Inst of Science & Technolog	213	152	61	12
269 University of Tennessee, Memphis	213	155	58	70
270 Forest Institute of Prof Psych	206	136	70	0
Total, 1st 270 Insts.	405,457	282,555	122,902	30,589
271 New York Medical College	203	69	134	37
272 Stephen F. Austin State University	201	126	75	0
273 Northeast Louisiana University	200	156	44	0
274 Medical College of Georgia	200	108	92	34
275 The Wright Institute	199	199	0	0
276 Golden Gate University	192	15	177	0
277 Biola University	188	163	25	0
278 Florida A & M University	182	116	66	3
279 Medical University of South Carolina	167	160	7	82
280 CUNY Mt. Sinai Sch of Medicine	164	164	0	0
Total, 1st 280 Insts.	407,353	283,831	123,522	30,745
281 University of the Pacific	154	136	18	1
282 Bryn Mawr College	154	44	110	0
283 Texas Christian University	143	119	24	2
284 Indiana University of Pennsylvania	140	100	40	0
285 Union College(NY)	140	19	121	0
286 Spalding University	140	25	115	0
287 Xavier University	135	84	51	7
288 Chicago School of Prof Psych	134	73	61	0
289 University of Health Sciences (Chicago)	131	129	2	19
290 Rockefeller University	128	128	0	185
Total, 1st 290 Insts.	408,752	284,688	124,064	30,959
291 Wesleyan University	128	123	5	10
292 Mayo Graduate School	120	101	19	145
293 Oregon Health Sciences University	119	117	2	31
294 Eastern Virginia Medical School	118	106	12	0
295 Uniformed Serv Univ of the Hlth Science	118	118	0	13
296 University of Northern Iowa	117	99	18	0
297 Mercer University	116	3	113	0
298 Creighton University	116	48	68	6
299 SUNY - Health Sci Ctr at Brooklyn	115	114	1	41
300 Alfred University	115	104	11	6
Total, 1st 300 Insts.	409,934	285,621	124,313	31,211

See explanatory information, if any, and SOURCE(S) at end of table.

248

**Table F-1. Graduate science and engineering students by enrollment status and total postdoctoral appointees in doctorate-granting institutions, ranked by total graduate science and engineering students: 1991**

Page 6 of 6

Institutional ranking	Total students	Full-time students	Part-time students	Postdoctoral appointees
301 The Medical College of Pennsylvania	109	91	18	35
302 University of Maryland Eastern Shore	104	71	33	0
303 Medical College of Wisconsin	102	93	9	56
304 Texas College of Osteopathic Medicine	89	89	0	19
305 Albany Medical College Grad Studies Pro	87	82	5	14
306 SUNY - Health Sci Ctr at Syracuse	82	72	10	14
307 Maharishi International University	78	78	0	1
308 Univ. of Osteopathic Med & Health Sci	74	74	0	0
309 Emerson College	72	45	27	0
310 Institute of Paper Science & Technology	70	70	0	0
Total, 1st 310 insts.	410,801	286,386	124,415	31,350
311 CUNY Herbert H. Lehman College	61	10	51	0
312 Rand Graduate School of Policy Studies	60	60	0	0
313 Philadelphia Coll of Pharmacy and Sci	60	47	13	3
314 Meharry Medical College	54	54	0	5
315 Catholic University of Puerto Rico	52	46	6	0
316 Baylor College of Dentistry	48	38	10	1
317 Mass College of Pharmacy/Allied Health	46	42	4	0
318 University of New England	41	25	16	0
319 Institute of Textile Technology	30	30	0	0
320 SUNY State College of Optometry	22	10	12	1
Total, 1st 320 insts.	411,275	286,748	124,527	31,360
321 Ponce School of Medicine	15	7	8	0
322 Smith College	6	1	5	0
323 Woods Hole Oceanographic Institution	0	0	0	31
324 Univ of Health Sciences (Kansas City)	0	0	0	0
325 Kirksville College of Osteopathic Med	0	0	0	0
326 Phila College of Osteopathic Medicine	0	0	0	12
327 Providence College	0	0	0	0
328 Univ of Texas MD Anderson Cancer Center	0	0	0	137
329 Chicago Coll of Osteo Medicine	0	0	0	1
330 Morehouse School of Medicine	0	0	0	12
Total, 1st 330 insts.	411,296	286,756	124,540	31,553
331 West Virginia Sch of Osteopathic Med	0	0	0	0
332 NE Ohio Univ Med School	0	0	0	0
333 Charles R. Drew Univ of Medicine & Sci	0	0	0	0
Total, 1st 333 insts.	411,296	286,756	124,540	31,553

NOTE: Includes medical schools

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table F-2. Graduate science and engineering students in doctorate-granting institutions, by area, ranked by total graduate science and engineering students: 1991**

Page 1 of 6

Institutional ranking	Total, all surveyed fields	Sciences, total	Engi- neering, total	Health fields
Total, all institutions	411,296	255,631	105,092	50,573
1 University of Wisconsin - Madison	5,914	4,031	1,228	655
2 University of Minnesota	5,720	3,954	1,236	530
3 University of Southern California	5,575	2,450	2,727	398
4 Ohio State University	5,439	3,352	1,237	850
5 University of Michigan	5,252	2,329	2,461	462
6 Texas A & M University	5,009	3,363	1,631	15
7 University of Calif at Berkeley	4,979	2,946	1,570	463
8 Univ of Texas at Austin	4,971	2,538	2,021	412
9 University of Illinois at Urbana	4,938	3,276	1,440	222
10 University of Colorado	4,544	2,542	1,343	659
Total, 1st 10 Insts.	52,341	30,781	16,894	4,666
11 George Washington University	4,544	2,638	1,569	337
12 University of Washington	4,454	2,738	1,138	578
13 Stanford University	4,422	2,007	2,330	85
14 Pennsylvania State University	4,419	2,475	1,796	148
15 Rutgers the State University	4,375	3,196	795	384
16 Massachusetts Institute of Technology	4,243	1,967	2,272	4
17 University of Calif at Los Angeles	4,171	2,428	783	960
18 Indiana University	4,135	3,379	45	711
19 Purdue University	4,022	2,051	1,672	299
20 University of Pittsburgh	3,944	1,933	816	1,195
Total, 1st 20 insts.	95,070	55,593	30,110	9,367
21 University of Maryland - College Park	3,876	2,498	1,314	64
22 University of Florida	3,741	1,972	1,252	517
23 Harvard University	3,472	2,848	197	427
24 Cornell University	3,453	2,450	926	77
25 SUNY - Buffalo	3,445	1,875	1,003	567
26 University of Arizona	3,391	2,388	753	250
27 University of Illinois at Chicago	3,355	1,444	943	968
28 Georgia Institute of Technology	3,326	842	2,484	0
29 Arizona State University	3,318	1,686	1,392	240
30 New York University	3,315	2,900	0	415
Total, 1st 30 insts.	129,762	76,496	40,374	12,892
31 University of Massachusetts	3,262	2,087	667	508
32 University of Houston-University Park	3,203	1,724	1,321	164
33 North Carolina State Univ at Raleigh	3,115	1,812	1,223	80
34 Virginia Polytechnic Inst and State Uni	3,113	1,551	1,519	43
35 Michigan State University	3,103	2,406	520	177
36 Univ of North Carolina at Chapel Hill	3,101	2,139	41	921
37 Wayne State University	3,056	1,390	1,086	580
38 Columbia University Main Division	2,964	1,670	743	551
39 Louisiana State University System	2,848	1,970	768	110
40 Iowa State University of Sci & Tech	2,818	1,962	849	7
Total, 1st 40 Insts.	160,351	95,207	49,111	16,033
41 University of Tennessee at Knoxville	2,789	1,412	1,009	368
42 University of Cincinnati	2,721	1,127	1,116	478
43 Boston University	2,631	1,637	586	408
44 Northeastern University	2,581	961	1,155	465
45 University of Calif at Davis	2,579	1,963	606	10
46 University of Connecticut	2,551	1,548	492	511
47 University of Pennsylvania	2,533	1,836	632	65
48 University of Oklahoma	2,529	1,143	705	681
49 University of Iowa	2,420	1,353	442	625
50 SUNY - Stony Brook	2,406	1,861	231	314
Total, 1st 50 Insts.	186,091	110,048	56,085	19,958
51 University of Kansas	2,403	1,418	501	484
52 University of South Florida	2,334	856	670	808
53 George Mason University	2,299	1,786	317	196
54 San Diego State University	2,166	1,243	286	637
55 Syracuse University	2,164	1,137	791	236
56 University of Hawaii at Manoa	2,092	1,507	216	369
57 Univ of Texas at Arlington	2,087	918	947	222
58 University of Massachusetts Lowell	2,049	838	958	253
59 Rensselaer Polytechnic Institute	2,036	663	1,373	0
60 Columbia University Teachers College	2,030	1,383	0	647
Total, 1st 60 Insts.	207,751	121,797	62,144	23,810

See explanatory information, if any, and SOURCE(S) at end of table.

250

**Table F-2. Graduate science and engineering students in doctorate-granting institutions, by area, ranked by total graduate science and engineering students: 1991**

Page 2 of 6

Institutional ranking	Total, all surveyed fields	Sciences, total	Engi- neering, total	Health fields
61 University of Utah	2,025	1,092	561	372
62 University of Kentucky	2,019	1,327	363	329
63 Colorado State University	2,010	1,353	440	217
64 Northwestern University	2,007	1,167	633	207
65 University of Missouri - Columbia	1,983	1,285	526	172
66 University of Virginia	1,943	1,242	632	69
67 University of Calif at San Diego	1,902	1,392	412	98
68 University of South Carolina	1,892	1,136	330	426
69 Johns Hopkins University	1,880	1,029	220	631
70 Oregon State University	1,861	1,262	497	102
Total, 1st 70 insts.	227,273	134,082	66,758	26,433
71 Yale University	1,861	1,446	174	241
72 Virginia Commonwealth University	1,853	1,128	16	709
73 New Jersey Institute of Technology	1,848	762	1,086	0
74 Auburn University	1,844	1,142	590	112
75 CUNY Graduate School and Univ Center	1,841	1,638	138	65
76 University of Chicago	1,830	1,809	0	21
77 University of Wisconsin - Milwaukee	1,827	1,209	416	202
78 Illinois Institute of Technology	1,818	1,117	701	0
79 Oklahoma State University	1,813	1,186	608	19
80 University of New Mexico	1,810	1,143	482	185
Total, 1st 80 insts.	245,618	146,662	70,969	27,987
81 Clemson University	1,795	927	802	66
82 University of Nebraska - Lincoln	1,756	1,236	484	36
83 Western Michigan University	1,691	1,255	281	155
84 Case Western Reserve University	1,669	737	643	289
85 Polytechnic University	1,667	581	1,086	0
86 University of Georgia	1,666	1,585	13	68
87 Carnegie-Mellon University	1,656	1,054	602	0
88 The American University	1,656	1,656	0	0
89 West Virginia University	1,643	827	407	409
90 Southern Illinois Univ at Carbondale	1,618	1,123	242	253
Total, 1st 90 insts.	262,435	157,643	75,529	29,263
91 Texas Woman's University	1,609	510	0	1,099
92 University of Akron	1,609	819	495	295
93 Antioch University	1,593	1,500	93	0
94 Temple University	1,592	1,100	89	403
95 Drexel University	1,566	573	993	0
96 Kansas State University	1,532	1,204	289	39
97 University of Calif at Santa Barbara	1,530	1,008	474	48
98 Washington University	1,510	872	481	157
99 Florida State University	1,503	1,203	157	143
100 De Paul University	1,489	1,405	0	84
Total, 1st 100 insts.	277,968	167,837	78,600	31,531
101 Texas Tech University	1,464	1,009	362	93
102 University of Delaware	1,447	980	402	65
103 The University of Alabama at Birmingham	1,446	591	168	687
104 University of Rochester	1,422	1,150	200	72
105 Duke University	1,412	1,074	264	74
106 University of Central Florida	1,403	612	606	185
107 Long Island University	1,403	862	0	541
108 SUNY - Albany	1,384	1,328	0	56
109 Princeton University	1,374	997	377	0
110 Washington State University	1,353	981	262	110
Total, 1st 110 insts.	292,076	177,421	81,241	33,414
111 University of Calif at Irvine	1,344	947	359	38
112 Stevens Institute of Technology	1,343	764	579	0
113 US Naval Postgraduate School	1,340	541	799	0
114 University of Rhode Island	1,339	765	330	244
115 University of Miami	1,289	837	318	134
116 University of Arkansas	1,269	600	669	0
117 Old Dominion University	1,267	674	426	167
118 CUNY City College	1,263	650	591	22
119 University of Missouri - Rolla	1,261	327	934	0
120 Utah State University	1,248	871	316	61
Total, 1st 120 insts.	305,039	184,397	86,562	34,080

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-2. Graduate science and engineering students in doctorate-granting institutions, by area, ranked by total graduate science and engineering students: 1991**

Page 3 of 6

Institutional ranking	Total, all surveyed fields	Sciences, total	Engi- neering, total	Health fields
121 Tulane University of Louisiana	1,232	597	154	481
122 Northern Illinois University	1,231	844	179	208
123 Santa Clara University	1,222	584	638	0
124 SUNY - Binghamton	1,214	703	439	72
125 University of Puerto Rico - Rio Piedras	1,213	1,055	0	158
126 Univ of Texas at Dallas	1,195	786	240	169
127 Cleveland State University	1,179	693	412	74
128 Mississippi State University	1,161	802	345	14
129 University of Louisville	1,156	617	467	72
130 University of North Texas	1,152	1,009	34	109
Total, 1st 130 Insts.	316,994	192,087	89,470	35,437
131 Georgia State University	1,149	950	0	199
132 Pace University	1,144	918	0	226
133 Wright State University	1,144	584	309	251
134 California Institute of Technology	1,125	698	427	0
135 University of Maryland - Balt Prof Sch	1,069	355	0	714
136 University of Idaho	1,068	728	340	0
137 Kent State University	1,059	807	0	252
138 Portland State University	1,051	693	275	83
139 The University of Alabama in Huntsville	1,051	382	636	33
140 Tufts University	1,044	611	316	117
Total, 1st 140 Insts.	327,898	198,813	91,773	37,312
141 University of Calif at San Francisco	1,034	275	23	736
142 University of Wyoming	1,029	747	177	105
143 Florida Institute of Technology	1,028	709	319	0
144 University of Maryland - Baltimore Cnty	1,026	803	212	11
145 Lehigh University	1,022	388	634	0
146 Vanderbilt University	1,016	697	268	51
147 Ohio University	1,014	682	277	55
148 Brigham Young University	1,013	738	226	49
149 Fairleigh Dickinson University	1,005	913	92	0
150 University of Denver	991	936	8	47
Total, 1st 150 insts.	338,076	205,701	94,009	38,366
151 Emory University	986	549	0	437
152 Univ of Texas Hlth Sci Ctr at Houston	962	428	0	534
153 Villanova University	959	542	417	0
154 New Mexico State University	956	656	300	0
155 Memphis State University	952	719	165	68
156 Wichita State University	945	328	315	302
157 Nova University	940	820	0	120
158 Northern Arizona University	939	783	0	156
159 The University of Alabama	901	574	308	19
160 University of Dayton	896	229	667	0
Total, 1st 160 Insts.	347,512	211,329	96,181	40,002
161 Florida International University	893	578	162	153
162 New York Institute of Technology	887	702	165	0
163 Catholic University of America	883	425	259	199
164 Worcester Polytechnic Institute	882	273	609	0
165 University of Nevada at Reno	871	615	192	64
166 St. Louis University	870	385	10	475
167 Florida Atlantic University	860	475	347	38
168 New School for Social Research	848	848	0	0
169 University of Oregon	830	830	0	0
170 Rice University	825	582	243	0
Total, 1st 170 Insts.	356,161	217,042	98,188	40,931
171 University of Notre Dame	822	602	220	0
172 Southern Methodist University	815	310	505	0
173 Marquette University	808	223	397	188
174 University of Mississippi	805	558	103	144
175 Univ of Texas at El Paso	799	363	293	143
176 Adelphi University	798	380	0	418
177 University of Missouri - Kansas City	790	552	0	238
178 Colorado School of Mines	781	553	228	0
179 Howard University	778	655	90	33
180 Brown University	761	644	117	0
Total, 1st 180 Insts.	364,118	221,882	100,141	42,095

See explanatory information, if any, and SOURCE(S) at end of table.

222



**Table F-2. Graduate science and engineering students in doctorate-granting institutions, by area, ranked by total graduate science and engineering students: 1991**

Page 4 of 6

Institutional ranking	Total, all surveyed fields	Sciences, total	Engi- neering, total	Health fields
181 Loyola University of Chicago	755	611	0	144
182 University of Toledo	751	377	318	56
183 Georgetown University	750	633	0	117
184 Oakland University	750	311	367	72
185 CUNY Hunter College	749	399	0	350
186 University of Calif at Riverside	733	733	0	0
187 University of Puerto Rico Med Sci Campu	724	113	0	611
188 University of Maine	711	554	157	0
189 St John's University	705	457	0	248
190 University of New Hampshire	697	460	174	63
Total, 1st 190 insts.	371,443	226,530	101,157	43,756
191 Boston College	678	464	0	214
192 University of Detroit	668	435	164	69
193 University of Vermont & St Agnc Colleg	648	495	114	39
194 Yeshiva University	632	607	0	25
195 South Dakota State University	629	291	199	139
196 University of Calif at Santa Cruz	628	584	44	0
197 Calif Sch of Prof Psych - San Diego	617	617	0	0
198 North Dakota State University	615	480	119	16
199 University of Southwestern Louisiana	607	453	109	45
200 Bowling Green State University	600	582	0	18
Total, 1st 200 insts.	377,765	231,538	101,906	44,321
201 Fordham University	598	598	0	0
202 Air Force Institute of Technology	589	155	434	0
203 Univ of North Carolina at Greensboro	585	303	0	282
204 University of Southern Mississippi	584	442	0	142
205 Hahnemann University	572	387	0	185
206 Illinois State University	570	505	0	65
207 Union Institute	556	519	4	33
208 Claremont Univ Center & Graduate School	552	552	0	0
209 Seton Hall University	540	396	0	144
210 Calif Sch of Prof Psych - Los Angeles	534	534	0	0
Total, 1st 210 insts.	383,445	235,929	102,344	45,172
211 University of Montana	525	520	0	5
212 Montana State University	521	393	91	37
213 Calif Sch of Prof Psych-Berkeley Alamed	519	519	0	0
214 University of South Alabama	515	271	71	173
215 Lamar University	512	216	239	57
216 Hofstra University	508	402	0	106
217 Baylor University	504	344	0	160
218 Univ of Texas Hlth Sci Ctr San Antonio	500	133	0	367
219 US International University	492	492	0	0
220 Miami University	485	443	15	27
Total, 1st 220 insts.	388,526	239,662	102,760	46,104
221 Michigan Technological University	483	192	291	0
222 University of Alaska at Fairbanks	480	371	109	0
223 Rush University	479	92	0	387
224 The Fielding Institute	478	478	0	0
225 Loma Linda University	468	105	0	363
226 Idaho State University	444	233	31	180
227 University of Puerto Rico	439	271	168	0
228 Ball State University	429	335	0	94
229 Brandeis University	428	428	0	0
230 SUNY - Coll of Env Science and Forestry	427	338	89	0
Total, 1st 230 insts.	393,081	242,505	103,448	47,128
231 East Carolina University	402	259	0	143
232 Duquesne University	401	222	0	179
233 East Tennessee State University	390	317	0	73
234 Caribbean Center for Advanced Studies	386	386	0	0
235 Indiana State University	372	319	35	18
236 College of William and Mary	371	355	16	0
237 University of Northern Colorado	367	182	0	185
238 Calif Sch of Prof Psych - Fresno	366	366	0	0
239 Sam Houston State University	362	362	0	0
240 California Institute of Integral Studie	362	362	0	0
Total, 1st 240 insts.	396,860	245,635	103,499	47,726

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-2. Graduate science and engineering students in doctorate-granting institutions, by area, ranked by total graduate science and engineering students: 1991**

Page 5 of 6

Institutional ranking	Total, all surveyed fields	Sciences, total	Engineering, total	Health fields
241 Dartmouth College	362	249	113	0
242 Univ of Texas SW Medical Ctr at Dallas	355	259	25	71
243 Univ of Texas Med Branch at Galveston	355	128	0	227
244 East Texas State University	346	346	0	0
245 Fuller Theological Seminary	343	343	0	0
246 Pacific Grad School of Prof Psych	341	341	0	0
247 Central Michigan University	335	292	0	43
248 Tennessee Technological University	323	153	170	0
249 Baylor College of Medicine	303	246	0	57
250 Louisiana Tech University	301	74	210	17
Total, 1st 250 insts.	400,224	248,066	104,017	48,141
251 University of North Dakota	301	229	37	35
252 Univ of Med and Dent of New Jersey	291	239	0	52
253 Medical College of Ohio at Toledo	290	0	0	290
254 Clarkson University	286	87	199	0
255 Andrews University	283	131	0	152
256 Clark Atlanta University	282	282	0	0
257 University of Missouri - St Louis	281	281	0	0
258 University of Tulsa	280	174	106	0
259 Clark University	275	275	0	0
260 South Dakota School of Mines and Tech	274	78	196	0
Total, 1st 260 insts.	403,067	249,842	104,555	48,670
261 University of Nebraska Medical Center	272	60	0	212
262 Thomas Jefferson University	269	183	0	86
263 Marshall University	261	204	0	57
264 New Mexico Institute of Mining and Tech	253	184	69	0
265 Wake Forest University	241	229	0	12
266 University of South Dakota	236	202	0	34
267 University of Arkansas - Med Sci Campus	226	61	0	165
268 Oregon Grad Inst of Science & Technolog	213	142	71	0
269 University of Tennessee, Memphis	213	112	0	101
270 Forest Institute of Prof Psych	206	206	0	0
Total, 1st 270 insts.	405,457	251,425	104,695	49,337
271 New York Medical College	203	160	0	43
272 Stephen F. Austin State University	201	201	0	0
273 Northeast Louisiana University	200	140	0	60
274 Medical College of Georgia	200	82	0	118
275 The Wright Institute	199	199	0	0
276 Golden Gate University	192	192	0	0
277 Biola University	188	188	0	0
278 Florida A & M University	182	90	43	49
279 Medical University of South Carolina	167	154	0	13
280 CUNY Mt. Sinal Sch of Medicine	164	164	0	0
Total, 1st 280 insts.	407,353	252,995	104,738	49,620
281 University of the Pacific	154	54	5	95
282 Bryn Mawr College	154	154	0	0
283 Texas Christian University	143	124	0	19
284 Indiana University of Pennsylvania	140	140	0	0
285 Union College(NY)	140	40	66	14
286 Spalding University	140	107	0	33
287 Xavier University	135	0	0	135
288 Chicago School of Prof Psych	134	134	0	0
289 University of Health Sciences (Chicago)	131	124	0	7
290 Rockefeller University	128	128	0	0
Total, 1st 290 insts.	408,752	254,000	104,829	49,923
291 Wesleyan University	128	128	0	0
292 Mayo Graduate School	120	104	0	16
293 Oregon Health Sciences University	119	118	0	1
294 Eastern Virginia Medical School	118	118	0	0
295 Uniformed Serv Univ of the Hlth Science	118	88	0	30
296 University of Northern Iowa	117	77	0	40
297 Mercer University	116	30	63	3
298 Creighton University	116	71	0	45
299 SUNY - Health Sci Ctr at Brooklyn	115	98	0	17
300 Alfred University	115	35	80	0
Total, 1st 300 insts.	409,934	254,867	104,992	50,075

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-2. Graduate science and engineering students in doctorate-granting institutions, by area, ranked by total graduate science and engineering students: 1991**

Page 6 of 6

Institutional ranking	Total, all surveyed fields	Sciences, total	Engi- neering, total	Health fields
301 The Medical College of Pennsylvania	109	78	0	31
302 University of Maryland Eastern Shore	104	104	0	0
303 Medical College of Wisconsin	102	102	0	0
304 Texas College of Osteopathic Medicine	89	0	0	89
305 Albany Medical College Grad Studies Pro	87	70	0	17
306 SUNY - Health Sci Ctr at Syracuse	82	68	0	14
307 Maharishi International University	78	78	0	0
308 Univ. of Osteopathic Med & Health Sci	74	0	0	74
309 Emerson College	72	0	0	72
310 Institute of Paper Science & Technology	70	0	70	0
Total, 1st 310 insts.	410,801	255,367	105,062	50,372
311 CUNY Herbert H. Lehman College	61	61	0	0
312 Rand Graduate School of Policy Studies	60	60	0	0
313 Philadelphia Coll of Pharmacy and Sci	60	29	0	31
314 Meharry Medical College	54	54	0	0
315 Catholic University of Puerto Rico	52	0	0	52
316 Baylor College of Dentistry	48	6	0	42
317 Mass College of Pharmacy/Allied Health	46	24	0	22
318 University of New England	41	9	0	32
319 Institute of Textile Technology	30	0	30	0
320 SUNY State College of Optometry	22	0	0	22
Total, 1st 320 insts.	411,275	255,610	105,092	50,573
321 Ponce School of Medicine	15	15	0	0
322 Smith College	6	6	0	0
323 Woods Hole Oceanographic Institution	0	0	0	0
324 Univ of Health Sciences (Kansas City)	0	0	0	0
325 Kirksville College of Osteopathic Med	0	0	0	0
326 Phila College of Osteopathic Medicine	0	0	0	0
327 Providence College	0	0	0	0
328 Univ of Texas MD Anderson Cancer Center	0	0	0	0
329 Chicago Coll of Osteo Medicine	0	0	0	0
330 Morehouse School of Medicine	0	0	0	0
Total, 1st 330 insts.	411,296	255,631	105,092	50,573
331 West Virginia Sch of Osteopathic Med	0	0	0	0
332 NE Ohio Univ Med School	0	0	0	0
333 Charles R. Drew Univ of Medicine & Sci	0	0	0	0
Total, 1st 333 insts.	411,296	255,631	105,092	50,573

NOTE: Includes medical schools

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table F-3. Male graduate science and engineering students by enrollment status and male postdoctoral appointees in doctorate-granting institutions, ranked by male graduate science and engineering students: 1991**

Page 1 of 6

Institutional ranking	Total male students	Male full-time students	Male part-time students	Male postdoctoral appointees
Total, all institutions	255,281	183,692	71,589	22,884
1 University of Southern California	4,058	2,481	1,577	268
2 University of Wisconsin - Madison	3,835	3,445	390	360
3 University of Michigan	3,816	3,245	571	405
4 Texas A & M University	3,696	3,163	533	166
5 Univ of Texas at Austin	3,593	3,105	488	189
6 University of Minnesota	3,554	3,056	498	289
7 University of Illinois at Urbana	3,554	3,551	3	196
8 Ohio State University	3,522	3,167	355	215
9 Stanford University	3,399	3,125	274	717
10 Massachusetts Institute of Technology	3,281	3,247	34	335
Total, 1st 10 insts.	36,308	31,585	4,723	3,140
11 University of Calif at Berkeley	3,279	3,279	0	463
12 Pennsylvania State University	3,086	2,173	913	165
13 Purdue University	2,924	2,715	209	176
14 George Washington University	2,852	905	1,947	20
15 University of Colorado	2,739	2,082	657	216
16 University of Washington	2,660	2,132	528	547
17 University of Maryland - College Park	2,641	1,632	1,009	118
18 Georgia Institute of Technology	2,624	2,029	595	54
19 Rutgers the State University	2,602	1,442	1,160	173
20 University of Florida	2,499	1,715	784	232
Total, 1st 20 insts.	64,214	51,689	12,525	5,304
21 University of Calif at Los Angeles	2,451	2,450	1	429
22 Cornell University	2,327	2,327	0	332
23 University of Arizona	2,301	2,006	295	206
24 Virginia Polytechnic Inst and State Uni	2,248	1,832	416	103
25 North Carolina State Univ at Raleigh	2,242	1,837	405	150
26 Harvard University	2,236	2,169	67	1,706
27 Arizona State University	2,220	1,318	902	58
28 University of Pittsburgh	2,193	1,396	797	135
29 Indiana University	2,140	1,635	505	254
30 University of Houston-University Park	2,115	866	1,249	23
Total, 1st 30 insts.	86,687	69,525	17,162	8,700
31 SUNY - Buffalo	2,078	1,502	576	262
32 Louisiana State University System	2,039	1,626	413	194
33 Michigan State University	2,039	1,729	310	125
34 Iowa State University of Sci & Tech	1,988	1,672	316	133
35 Columbia University Main Division	1,906	1,513	393	300
36 Wayne State University	1,886	977	909	116
37 University of Massachusetts	1,868	832	1,036	149
38 University of Tennessee at Knoxville	1,789	1,019	770	121
39 University of Illinois at Chicago	1,763	1,176	587	101
40 University of Calif at Davis	1,712	1,620	92	165
Total, 1st 40 insts.	105,755	83,191	22,564	10,366
41 University of Pennsylvania	1,710	1,541	169	455
42 University of Cincinnati	1,684	1,204	480	128
43 Rensselaer Polytechnic Institute	1,654	1,186	468	61
44 Boston University	1,627	1,109	518	25
45 Northeastern University	1,626	772	854	21
46 University of Oklahoma	1,558	1,086	472	82
47 New York University	1,556	835	721	135
48 Univ of North Carolina at Chapel Hill	1,520	1,362	158	277
49 New Jersey Institute of Technology	1,506	571	935	0
50 University of Iowa	1,497	1,278	219	223
Total, 1st 50 insts.	121,693	94,135	27,558	11,773
51 Univ of Texas at Arlington	1,480	701	779	31
52 Polytechnic University	1,450	399	1,051	31
53 University of Connecticut	1,421	1,027	394	72
54 University of Massachusetts Lowell	1,407	651	756	19
55 Illinois Institute of Technology	1,404	442	962	13
56 SUNY - Stony Brook	1,387	1,069	318	131
57 Syracuse University	1,387	753	634	38
58 University of Utah	1,378	1,139	239	117
59 University of Virginia	1,358	1,236	122	172
60 University of Calif at San Diego	1,352	1,224	128	496
Total, 1st 60 insts.	135,717	102,776	32,941	12,893

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-3. Male graduate science and engineering students by enrollment status and male postdoctoral appointees in doctorate-granting institutions, ranked by male graduate science and engineering students: 1991**

Page 2 of 6

Institutional ranking	Total male students	Male full-time students	Male part-time students	Male postdoctoral appointees
61 George Mason University	1,350	260	1,090	0
62 Oregon State University	1,343	1,262	81	55
63 University of Missouri - Columbia	1,342	911	431	73
64 Clemson University	1,320	1,068	252	25
65 University of Kansas	1,320	553	767	105
66 Auburn University	1,303	710	593	30
67 University of Nebraska - Lincoln	1,289	1,011	278	52
68 Colorado State University	1,286	911	375	155
69 Northwestern University	1,281	1,212	69	197
70 Oklahoma State University	1,264	514	750	30
Total, 1st 70 insts.	148,815	111,188	37,627	13,615
71 University of Kentucky	1,261	1,027	234	182
72 US Naval Postgraduate School	1,252	1,252	0	0
73 University of Hawaii at Manoa	1,233	1,098	135	37
74 Drexel University	1,218	403	815	34
75 University of South Florida	1,205	627	578	33
76 University of Chicago	1,189	1,189	0	350
77 Carnegie-Mellon University	1,162	980	182	66
78 University of Calif at Santa Barbara	1,133	1,120	13	128
79 Stevens Institute of Technology	1,129	432	697	6
80 University of New Mexico	1,115	771	344	46
Total, 1st 80 insts.	160,712	120,087	40,625	14,497
81 University of Missouri - Rolla	1,085	591	494	13
82 CUNY Graduate School and Univ Center	1,069	936	133	41
83 University of South Carolina	1,064	757	307	43
84 San Diego State University	1,059	565	494	12
85 Kansas State University	1,056	919	137	48
86 University of Georgia	1,035	933	102	108
87 Yale University	1,024	997	27	640
88 Johns Hopkins University	1,021	905	116	516
89 University of Arkansas	1,020	556	464	26
90 Washington University	1,018	747	271	331
Total, 1st 90 insts.	171,163	127,993	43,170	16,275
91 Case Western Reserve University	1,009	727	282	204
92 University of Rochester	1,006	915	91	199
93 Princeton University	990	990	0	186
94 CUNY City College	982	233	749	9
95 Western Michigan University	982	419	563	1
96 University of Akron	979	659	320	53
97 Texas Tech University	976	753	223	41
98 University of Calif at Irvine	971	898	73	192
99 University of Delaware	965	753	212	49
100 Southern Illinois Univ at Carbondale	961	786	195	23
Total, 1st 100 insts.	180,984	135,106	45,878	17,232
101 West Virginia University	950	711	239	44
102 University of Wisconsin - Milwaukee	945	586	359	22
103 Florida State University	936	711	225	62
104 Washington State University	915	828	87	96
105 Santa Clara University	913	128	785	1
106 Temple University	900	882	218	40
107 Duke University	893	834	59	257
108 California Institute of Technology	888	888	0	231
109 Mississippi State University	886	744	142	17
110 Utah State University	868	787	81	17
Total, 1st 110 insts.	190,078	142,005	48,073	18,019
111 De Paul University	859	331	528	0
112 University of Central Florida	855	305	550	4
113 University of Idaho	827	404	423	27
114 SUNY - Albany	819	562	257	29
115 SUNY - Binghamton	812	450	362	11
116 The American University	810	447	363	2
117 The University of Alabama in Huntsville	808	341	467	4
118 Univ of Texas at Dallas	792	372	420	6
119 Lehigh University	779	552	227	29
120 Old Dominion University	774	360	414	5
Total, 1st 120 insts.	198,213	146,129	52,084	18,136

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-3. Male graduate science and engineering students by enrollment status and male postdoctoral appointees in doctorate-granting institutions, ranked by male graduate science and engineering students: 1991**

Page 3 of 6

Institutional ranking	Total male students	Male full-time students	Male part-time students	Male postdoctoral appointees
121 Virginia Commonwealth University	769	498	271	90
122 Florida Institute of Technology	758	362	396	6
123 University of Miami	753	635	118	105
124 University of Louisville	734	352	382	19
125 Worcester Polytechnic Institute	731	304	427	9
126 University of Rhode Island	727	511	216	25
127 New Mexico State University	714	518	196	18
128 University of Dayton	706	138	568	2
129 Cleveland State University	694	272	422	12
130 Brigham Young University	685	324	361	43
Total, 1st 130 insts.	235,484	150,043	55,441	18,465
131 Tulane University of Louisiana	677	572	105	33
132 The University of Alabama at Birmingham	676	551	125	173
133 Ohio University	667	585	82	13
134 University of North Texas	663	399	264	5
135 Northern Illinois University	657	435	222	19
136 University of Wyoming	654	535	119	21
137 The University of Alabama	654	541	113	24
138 Vanderbilt University	649	609	40	174
139 Portland State University	647	305	342	0
140 New School for Social Research	643	301	342	0
Total, 1st 140 insts.	212,071	154,876	57,195	18,927
141 Long Island University	627	225	402	0
142 Southern Methodist University	627	105	522	14
143 Villanova University	625	151	474	0
144 Colorado School of Mines	615	368	247	4
145 Wright State University	613	274	339	15
146 Florida Atlantic University	610	315	295	0
147 New York Institute of Technology	609	267	342	0
148 University of Maryland - Baltimore Cnty	604	311	293	14
149 Rice University	599	560	39	74
150 University of Oregon	595	559	36	69
Total, 1st 150 insts.	218,195	158,011	60,184	19,117
151 University of Nevada at Reno	574	507	67	26
152 Pace University	571	38	533	0
153 University of Toledo	564	351	213	22
154 Memphis State University	558	331	227	6
155 Air Force Institute of Technology	556	556	0	0
156 Brown University	555	536	19	72
157 University of Notre Dame	552	524	28	54
158 Columbia University Teachers College	541	213	328	0
159 Catholic University of America	504	103	401	18
160 University of Mississippi	503	470	33	32
Total, 1st 160 insts.	223,673	161,640	62,033	19,347
161 Wichita State University	499	225	274	0
162 University of Denver	498	239	259	20
163 Georgia State University	497	293	204	13
164 Marquette University	495	297	198	2
165 University of Maine	494	395	99	7
166 Fairleigh Dickinson University	490	111	379	0
167 Oakland University	484	151	333	0
168 Florida International University	476	177	299	3
169 Kent State University	470	335	135	15
170 Univ of Texas at El Paso	465	314	151	7
Total, 1st 170 insts.	228,541	164,177	64,364	19,414
171 Tufts University	454	344	110	147
172 Univ of Texas Hlth Sci Ctr at Houston	453	290	163	0
173 University of Southwestern Louisiana	447	377	70	0
174 University of Calif at Riverside	442	435	7	95
175 North Dakota State University	442	382	60	18
176 Antioch University	441	344	97	0
177 University of New Hampshire	437	366	71	1
178 University of Puerto Rico - Rio Piedras	425	294	131	5
179 Emory University	417	310	107	78
180 University of Calif at Santa Cruz	406	396	10	46
Total, 1st 180 insts.	232,905	167,715	65,190	19,804

See explanatory information, if any, and SOURCE(S) at end of table.

215



**Table F-3. Male graduate science and engineering students by enrollment status and male postdoctoral appointees in doctorate-granting institutions, ranked by male graduate science and engineering students: 1991**

Page 4 of 6

Institutional ranking	Total male students	Male full-time students	Male part-time students	Male postdoctoral appointees
181 Howard University	399	256	143	8
182 Lamar University	378	290	88	2
183 University of Vermont & St Agric Colleg	376	275	101	54
184 Michigan Technological University	375	360	15	0
185 Northern Arizona University	375	233	142	1
186 Montana State University	371	341	30	27
187 University of Detroit	367	94	273	0
188 South Dakota State University	356	294	62	1
189 Claremont Univ Center & Graduate School	350	107	243	0
190 University of Missouri - Kansas City	349	158	191	9
Total, 1st 190 insts.	236,601	170,123	66,478	19,906
191 University of Montana	329	259	70	2
192 Bowling Green State University	327	259	68	15
193 University of Alaska at Fairbanks	322	215	107	2
194 Nova University	320	119	201	0
195 Georgetown University	316	273	43	46
196 St. Louis University	316	186	130	37
197 University of Puerto Rico	312	305	7	0
198 Fordham University	304	151	153	1
199 University of Southern Mississippi	292	240	52	5
200 Loyola University of Chicago	292	186	106	11
Total, 1st 200 insts.	239,731	172,316	67,415	20,025
201 University of Calif at San Francisco	291	280	11	664
202 SUNY - Coll of Env Science and Forestry	276	140	136	7
203 St John's University	274	136	138	1
204 Illinois State University	273	169	104	2
205 Baylor University	255	221	34	11
206 University of Maryland - Balt Prof Sch	254	181	73	56
207 Louisiana Tech University	252	191	61	0
208 Miami University	250	232	18	12
209 Dartmouth College	249	247	2	50
210 Brandeis University	247	247	0	58
Total, 1st 210 insts.	242,352	174,360	67,992	20,886
211 CUNY Hunter College	246	106	140	4
212 Boston College	239	200	39	7
213 South Dakota School of Mines and Tech	237	222	15	2
214 Indiana State University	236	160	76	1
215 Clarkson University	233	226	7	56
216 Loma Linda University	229	154	75	27
217 Sam Houston State University	228	116	112	0
218 College of William and Mary	225	189	36	10
219 East Texas State University	225	99	126	0
220 Union Institute	224	224	0	0
Total, 1st 220 insts.	244,674	176,056	68,618	20,993
221 Hofstra University	215	113	102	0
222 Hahnemann University	214	182	32	21
223 University of South Alabama	212	122	90	14
224 Idaho State University	211	147	64	0
225 Tennessee Technological University	209	159	50	0
226 US International University	209	88	121	0
227 Univ of Texas SW Medical Ctr at Dallas	203	202	1	227
228 Yeshiva University	199	182	37	153
229 New Mexico Institute of Mining and Tech	195	195	0	0
230 Ball State University	193	137	56	0
Total, 1st 230 insts.	246,734	177,563	69,171	21,408
231 University of Tulsa	191	134	57	0
232 East Tennessee State University	189	85	104	0
233 University of North Dakota	182	151	31	2
234 Calif Sch of Prof Psych - San Diego	182	115	67	0
235 Baylor College of Medicine	181	181	0	170
236 University of Puerto Rico Med Sci Campu	171	89	82	0
237 Univ of Texas Hlth Sci Ctr San Antonio	169	144	25	120
238 Clark Atlanta University	169	121	48	7
239 Oregon Grad Inst of Science & Technolog	168	116	52	9
240 Seton Hall University	168	33	135	0
Total, 1st 240 insts.	248,504	178,732	69,772	21,716

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-3. Male graduate science and engineering students by enrollment status and male postdoctoral appointees in doctorate-granting institutions, ranked by male graduate science and engineering students: 1991**

Page 5 of 6

Institutional ranking	Total male students	Male full-time students	Male part-time students	Male postdoctoral appointees
241 Central Michigan University	188	136	32	3
242 University of Missouri - St Louis	160	106	54	14
243 California Institute of Integral Studie	158	71	87	0
244 Calif Sch of Prof Psych - Los Angeles	154	130	24	0
245 Fuller Theological Seminary	151	115	36	0
246 Calif Sch of Prof Psych-Berkeley/Alamed	149	136	13	0
247 East Carolina University	148	117	31	16
248 Duquesne University	148	87	51	0
249 Univ of Med and Dent of New Jersey	147	140	7	87
250 The Fielding Institute	143	143	0	0
Total, 1st 250 Insts.	250,030	179,923	70,107	21,836
251 Univ of Texas Med Branch at Galveston	143	136	7	71
252 University of Northern Colorado	142	106	36	0
253 Adelphi University	141	36	105	1
254 Univ of North Carolina at Greensboro	139	90	49	0
255 Clark University	138	121	17	7
256 Texas Woman's University	137	72	65	0
257 University of South Dakota	132	93	39	0
258 Wake Forest University	129	112	17	37
259 Stephen F. Austin State University	127	80	47	0
260 Calif Sch of Prof Psych - Fresno	124	107	17	0
Total, 1st 260 insts.	251,382	180,876	70,506	21,952
261 Golden Gate University	122	11	111	0
262 CUNY Mt. Sinai Sch of Medicine	116	116	0	0
263 Union College(NY)	114	14	100	0
264 Medical University of South Carolina	114	109	5	54
265 Medical College of Ohio at Toledo	114	78	36	34
266 Marshall University	105	67	38	2
267 Caribbean Center for Advanced Studies	105	71	34	0
268 New York Medical College	99	41	58	24
269 Northeast Louisiana University	98	80	18	0
270 Mercer University	98	3	95	0
Total, 1st 270 Insts.	252,467	181,466	71,001	22,066
271 Biola University	96	80	16	0
272 Pacific Grad School of Prof Psych	91	33	58	0
273 University of Nebraska Medical Center	89	62	27	32
274 Thomas Jefferson University	87	74	13	129
275 Rockefeller University	87	87	0	115
276 University of Tennessee, Memphis	84	79	5	60
277 Florida A & M University	84	49	35	1
278 Forest Institute of Prof Psych	83	57	26	0
279 Texas Christian University	82	66	16	1
280 The Wright Institute	80	80	0	0
Total, 1st 280 insts.	253,330	182,133	71,197	22,404
281 Texas College of Osteopathic Medicine	79	79	0	13
282 Andrews University	78	52	26	0
283 Rush University	77	62	15	22
284 SUNY - Health Sci Ctr at Brooklyn	75	74	1	32
285 Indiana University of Pennsylvania	74	50	24	0
286 Wesleyan University	74	71	3	6
287 Mayo Graduate School	73	64	9	109
288 Alfred University	73	64	9	6
289 University of Maryland Eastern Shore	73	50	23	0
290 Medical College of Georgia	68	39	29	19
Total, 1st 290 Insts.	254,074	182,738	71,336	22,611
291 Medical College of Wisconsin	64	59	5	36
292 Maharishi International University	63	63	0	1
293 Uniformed Serv Univ of the Hlth Science	61	61	0	7
294 University of the Pacific	60	47	13	1
295 Oregon Health Sciences University	58	57	1	16
296 Creighton University	55	30	25	3
297 Institute of Paper Science & Technology	54	54	0	0
298 Xavier University	51	29	22	2
299 Albany Medical College Grad Studies Pro	51	51	0	8
300 University of Health Sciences (Chicago)	50	50	0	15
Total, 1st 300 Insts.	254,641	183,239	71,402	22,700

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-3. Male graduate science and engineering students by enrollment status and male postdoctoral appointees in doctorate-granting institutions, ranked by male graduate science and engineering students: 1991**

Page 6 of 6

Institutional ranking	Total male students	Male full-time students	Male part-time students	Male postdoctoral appointees
301 The Medical College of Pennsylvania	50	42	8	20
302 University of Arkansas - Med Sci Campus	48	33	15	8
303 University of Northern Iowa	47	34	13	0
304 Chicago School of Prof Psych	47	27	20	0
305 Spaulding University	45	10	35	0
306 SUNY - Health Sci Ctr at Syracuse	43	41	2	11
307 Rand Graduate School of Policy Studies	41	41	0	0
308 Bryn Mawr College	39	11	28	0
309 Philadelphia Coll of Pharmacy and Sci	38	29	9	3
310 CUNY Herbert H. Lehman College	35	6	29	0
Total, 1st 310 Insts.	255,074	183,513	71,561	22,742
311 Eastern Virginia Medical School	32	29	3	0
312 Meharry Medical College	31	31	0	5
313 Baylor College of Dentistry	26	21	5	0
314 Institute of Textile Technology	25	25	0	0
315 Univ. of Osteopathic Med & Health Sci	23	23	0	0
316 Mass College of Pharmacy/Allied Health	22	19	3	0
317 University of New England	22	12	10	0
318 Catholic University of Puerto Rico	12	10	2	0
319 SUNY State College of Optometry	7	5	2	1
320 Ponce School of Medicine	5	3	2	0
Total, 1st 320 Insts.	255,279	183,691	71,588	22,748
321 Smith College	2	1	1	0
322 Woods Hole Oceanographic Institution	0	0	0	27
323 Univ of Health Sciences (Kansas City)	0	0	0	0
324 Kirksville College of Osteopathic Med	0	0	0	0
325 Chicago Coll of Osteo Medicine	0	0	0	0
326 Phila College of Osteopathic Medicine	0	0	0	8
327 NE Ohio Univ Med School	0	0	0	0
328 Emerson College	0	0	0	0
329 West Virginia Sch of Osteopathic Med	0	0	0	0
330 Univ of Texas MD Anderson Cancer Center	0	0	0	93
Total, 1st 330 Insts.	255,281	183,692	71,589	22,876
331 Providence College	0	0	0	0
332 Morehouse School of Medicine	0	0	0	8
333 Charles R. Drew Univ of Medicine & Sci	0	0	0	0
Total, 1st 333 Insts.	255,281	183,692	71,589	22,884

NOTE: Includes medical schools

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table F-4. Female graduate science and engineering students by enrollment status and female postdoctoral appointees in doctorate-granting institutions, ranked by female graduate science and engineering students: 1991**

Page 1 of 6

Institutional ranking	Total female students	Female full-time students	Female part-time students	Female postdoctoral appointees
Total, all institutions	156,015	103,064	52,951	8,669
1 University of Minnesota	2,166	1,752	414	127
2 University of Wisconsin - Madison	2,079	1,716	363	142
3 Indiana University	1,995	1,190	805	113
4 Ohio State University	1,917	1,521	396	80
5 University of Colorado	1,805	1,290	515	103
6 University of Washington	1,794	1,421	373	265
7 Rutgers the State University	1,773	641	932	47
8 New York University	1,759	722	1,037	49
9 University of Pittsburgh	1,751	908	843	71
10 University of Calif at Los Angeles	1,720	1,720	0	191
Total, 1st 10 insts.	18,759	13,081	5,678	1,188
11 University of Calif at Berkeley	1,700	1,700	0	191
12 George Washington University	1,692	642	1,050	11
13 University of Illinois at Chicago	1,592	850	742	49
14 Univ of North Carolina at Chapel Hill	1,581	1,329	252	115
15 University of Southern California	1,517	1,101	416	98
16 Columbia University Teachers College	1,489	615	874	0
17 Texas Woman's University	1,472	630	842	1
18 University of Michigan	1,436	1,300	136	137
19 University of Massachusetts	1,394	668	726	76
20 University of Illinois at Urbana	1,384	1,384	0	67
Total, 1st 20 insts.	34,016	23,300	10,716	1,933
21 Univ of Texas at Austin	1,378	1,105	273	56
22 SUNY - Buffalo	1,367	815	552	77
23 Pennsylvania State University	1,333	1,005	328	52
24 Texas A & M University	1,313	1,098	215	32
25 University of Florida	1,242	698	544	62
26 Harvard University	1,236	1,165	71	700
27 University of Maryland - College Park	1,235	756	479	15
28 Wayne State University	1,170	572	598	40
29 A sch University	1,152	859	293	0
30 ersity of Connecticut	1,130	749	381	30
Total, 1st 30 insts.	46,572	32,122	14,450	2,997
31 University of South Florida	1,129	529	600	13
32 Cornell University	1,126	1,126	0	148
33 San Diego State University	1,107	518	589	0
34 Purdue University	1,098	991	107	49
35 Arizona State University	1,098	577	521	27
36 University of Houston-University Park	1,094	427	667	7
37 University of Arizona	1,090	858	232	96
38 Virginia Commonwealth University	1,084	670	414	48
39 University of Kansas	1,083	508	575	36
40 Michigan State University	1,064	881	183	51
Total, 1st 40 insts.	57,545	39,207	18,338	3,472
41 Columbia University Main Division	1,058	748	310	132
42 University of Cincinnati	1,037	880	357	50
43 Stanford University	1,023	981	42	253
44 SUNY - Stony Brook	1,019	582	437	66
45 Boston University	1,004	700	304	14
46 University of Tennessee at Knoxville	1,000	604	396	16
47 University of Oklahoma	971	483	488	11
48 Massachusetts Institute of Technology	962	940	22	95
49 Northeastern University	955	494	461	15
50 George Mason University	949	233	716	0
Total, 1st 50 insts.	67,523	45,652	21,871	4,124
51 University of Iowa	923	637	286	79
52 University of Wisconsin - Milwaukee	882	432	450	6
53 North Carolina State Univ at Raleigh	873	672	201	42
54 University of Calif at Davis	867	826	41	48
55 Virginia Polytechnic Inst and State Uni	865	707	158	19
56 University of Hawaii at Manoa	859	669	190	13
57 Johns Hopkins University	859	722	137	250
58 The American University	846	492	354	0
59 Yale University	837	761	76	257
60 Iowa State University of Sci & Tech	830	660	170	27
Total, 1st 60 insts.	76,164	52,230	23,934	4,865

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-4. Female graduate science and engineering students by enrollment status and female postdoctoral appointees in doctorate-granting institutions, ranked by female graduate science and engineering students: 1991**

Page 2 of 6

Institutional ranking	Total female students	Female full-time students	Female part-time students	Female postdoctoral appointees
61 University of South Carolina	829	475	353	14
62 University of Pennsylvania	823	761	62	187
63 University of Maryland - Balt Prof Sch	815	337	478	27
64 Louisiana State University System	809	646	163	62
65 University of Puerto Rico - Rio Piedras	788	530	258	1
66 Syracuse University	777	447	330	9
67 Long Island University	776	245	531	0
68 CUNY Graduate School and Univ Center	772	663	109	16
69 The University of Alabama at Birmingham	770	527	243	84
70 University of Kentucky	758	540	218	60
Total, 1st 70 Insts.	84,080	57,401	26,679	5,325
71 University of Calif at San Francisco	743	730	13	265
72 Northwestern University	726	691	35	61
73 Colorado State University	724	545	179	38
74 Western Michigan University	709	315	394	0
75 Georgia Institute of Technology	702	550	152	12
76 University of New Mexico	695	445	250	8
77 West Virginia University	693	395	298	13
78 Temple University	692	532	160	38
79 Case Western Reserve University	660	404	256	57
80 Adelphi University	657	187	470	1
Total, 1st 80 Insts.	91,081	62,195	28,886	5,818
81 Southern Illinois Univ at Carbondale	657	501	156	7
82 Georgia State University	652	351	301	11
83 University of Utah	647	411	236	48
84 University of Massachusetts Lowell	642	264	378	0
85 University of Missouri - Columbia	641	405	236	25
86 University of Chicago	641	641	0	105
87 University of Georgia	631	553	78	42
88 De Paul University	630	258	372	0
89 University of Akron	630	325	305	3
90 Nova University	620	280	340	0
Total, 1st 90 Insts.	97,472	66,184	31,288	6,059
91 University of Rhode Island	612	372	240	3
92 Univ of Texas at Arlington	607	249	358	5
93 Tufts University	590	502	88	95
94 Kent State University	589	327	262	1
95 University of Virginia	585	544	41	59
96 Northern Illinois University	574	373	201	3
97 Pace University	573	66	507	0
98 Emory University	569	386	183	35
99 Florida State University	567	382	185	10
100 SUNY - Albany	565	329	236	0
Total, 1st 100 Insts.	103,303	69,714	33,589	6,270
101 Northern Arizona University	564	316	248	0
102 Tulane University of Louisiana	555	431	124	11
103 St. Louis University	554	237	317	18
104 University of Puerto Rico Med Sci Campus	553	427	126	0
105 University of Calif at San Diego	550	519	31	157
106 Oklahoma State University	549	220	329	13
107 University of Central Florida	548	287	261	0
108 Auburn University	541	284	257	11
109 University of Miami	536	361	175	22
110 Wright State University	531	226	305	3
Total, 1st 110 Insts.	108,784	73,022	35,762	6,505
111 Duke University	519	495	24	106
112 Oregon State University	518	475	43	18
113 Fairleigh Dickinson University	515	149	366	0
114 Univ of Texas Hlth Sci Ctr at Houston	509	267	242	0
115 CUNY Hunter College	503	147	356	1
116 Carnegie-Mellon University	494	280	214	18
117 Old Dominion University	493	229	264	1
118 University of Denver	493	291	202	23
119 Washington University	492	432	60	157
120 University of North Texas	489	316	173	3
Total, 1st 120 Insts.	113,809	76,103	37,706	6,832

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-4. Female graduate science and engineering students by enrollment status and female postdoctoral appointees in doctorate-granting institutions, ranked by female graduate science and engineering students: 1991**

Page 3 of 6

Institutional ranking	Total female students	Female full-time students	Female part-time students	Female postdoctoral appointees
121 Texas Tech University	488	331	157	4
122 Cleveland State University	485	182	303	3
123 University of Delaware	482	322	160	17
124 Kansas State University	476	390	86	15
125 Clemson University	475	326	149	11
126 University of Nebraska - Lincoln	467	356	111	15
127 Loyola University of Chicago	463	237	226	10
128 Wichita State University	446	110	336	0
129 Univ of North Carolina at Greensboro	446	242	204	0
130 University of Missouri - Kansas City	441	128	313	6
Total, 1st 130 insts.	118,478	78,727	39,751	6,913
131 Boston College	439	256	183	6
132 Washington State University	438	353	85	24
133 Calif Sch of Prof Psych - San Diego	435	264	171	0
134 Georgetown University	434	300	134	33
135 Yeshiva University	433	314	119	91
136 St John's University	431	228	203	2
137 University of Louisville	422	231	191	6
138 University of Maryland - Baltimore Cnty	422	255	167	10
139 Florida International University	417	157	260	1
140 University of Rochester	416	355	61	62
Total, 1st 140 insts.	122,765	81,440	41,325	7,148
141 Illinois Institute of Technology	414	115	299	3
142 Portland State University	404	175	229	0
143 Univ of Texas at Dallas	403	221	182	0
144 Rush University	402	250	152	7
145 SUNY - Binghamton	402	236	166	2
146 University of Calif at Santa Barbara	397	395	2	22
147 Memphis State University	394	218	176	2
148 Princeton University	384	384	0	72
149 Rensselaer Polytechnic Institute	382	248	134	11
150 Calif Sch of Prof Psych - Los Angeles	380	341	39	0
Total, 1st 150 insts.	126,727	84,023	42,704	7,267
151 Utah State University	380	318	62	8
152 Catholic University of America	379	120	259	6
153 Howard University	379	231	148	12
154 University of Wyoming	375	256	119	3
155 University of Calif at Irvine	373	362	11	82
156 Seton Hall University	372	61	311	0
157 Calif Sch of Prof Psych-Berkeley/Alamed	370	308	62	0
158 Vanderbilt University	367	344	23	68
159 Hahnemann University	358	272	88	5
160 Drexel University	348	120	228	2
Total, 1st 160 insts.	130,428	86,415	44,013	7,453
161 Ohio University	347	310	37	5
162 New Jersey Institute of Technology	342	131	211	0
163 The Fielding Institute	335	335	0	0
164 Univ of Texas at El Paso	334	131	203	2
165 Villanova University	334	95	239	0
166 Union Institute	332	332	0	0
167 Univ of Texas Hlth Sci Ctr San Antonio	331	167	164	69
168 Brigham Young University	328	169	159	6
169 Marquette University	313	162	151	1
170 Santa Clara University	309	64	245	0
Total, 1st 170 insts.	133,733	88,311	45,422	7,536
171 University of South Alabama	303	165	138	6
172 University of Mississippi	302	231	71	6
173 University of Detroit	301	95	206	0
174 University of Nevada at Reno	297	211	86	12
175 Illinois State University	297	210	87	1
176 Fordham University	294	141	153	1
177 Hofstra University	293	187	106	1
178 University of Southern Mississippi	292	167	125	0
179 University of Calif at Riverside	291	287	4	35
180 US International University	283	143	140	0
Total, 1st 180 insts.	136,686	90,148	46,538	7,598

See explanatory information, if any, and SOURCE(S) at end of table.



**Table F-4. Female graduate science and engineering students by enrollment status and female postdoctoral appointees in doctorate-granting institutions, ranked by female graduate science and engineering students: 1991**

Page 4 of 6

Institutional ranking	Total female students	Female full-time students	Female part-time students	Female postdoctoral appointees
181 CUNY City College	281	69	212	0
182 Caribbean Center for Advanced Studies	281	211	70	0
183 New York Institute of Technology	278	97	181	0
184 Mississippi State University	275	225	50	2
185 Bowling Green State University	273	223	50	5
186 South Dakota State University	273	119	154	1
187 University of Vermont & St Agric Colleg	272	221	51	22
188 University of Notre Dame	270	261	9	7
189 Florida Institute of Technology	270	167	103	7
190 Oakland University	266	94	172	0
Total, 1st 190 insts.	139,425	91,835	47,590	7,642
191 University of New Hampshire	260	207	53	3
192 East Carolina University	254	201	53	4
193 Duquesne University	253	121	132	0
194 Florida Atlantic University	250	66	184	0
195 Pacific Grad School of Prof Psych	250	103	147	0
196 Baylor University	249	184	65	0
197 University of Arkansas	249	189	60	5
198 The University of Alabama	247	221	26	4
199 Lehigh University	243	169	74	5
200 The University of Alabama in Huntsville	243	113	130	0
Total, 1st 200 insts.	141,923	93,409	48,514	7,663
201 Calif Sch of Prof Psych - Fresno	242	208	34	0
202 New Mexico State University	242	177	65	5
203 University of Idaho	241	133	108	9
204 Loma Linda University	239	117	122	13
205 California Institute of Technology	237	237	0	51
206 Ball State University	236	122	114	0
207 University of Oregon	235	224	11	32
208 Miami University	235	204	31	4
209 Idaho State University	233	156	77	0
210 Rice University	226	219	7	27
Total, 1st 210 insts.	144,289	95,206	49,083	7,804
211 University of Northern Colorado	225	144	81	0
212 University of Calif at Santa Cruz	222	220	2	2
213 University of Maine	217	172	45	4
214 Polytechnic University	217	42	175	5
215 Stevens Institute of Technology	214	43	171	0
216 Univ of Texas Med Branch at Galveston	212	122	90	30
217 Brown University	206	192	14	18
218 New School for Social Research	205	115	90	0
219 Andrews University	205	131	74	0
220 California Institute of Integral Studie	204	88	116	0
Total, 1st 220 insts.	146,416	96,475	49,941	7,863
221 Claremont Univ Center & Graduate School	202	78	124	0
222 East Tennessee State University	201	92	109	0
223 University of Montana	196	153	43	0
224 Fuller Theological Seminary	192	145	47	0
225 University of Dayton	190	65	125	0
226 Southern Methodist University	188	66	122	3
227 University of Toledo	187	130	57	6
228 University of Nebraska Medical Center	183	53	130	10
229 Thomas Jefferson University	182	122	60	49
230 Brandeis University	181	178	3	31
Total, 1st 230 insts.	148,318	97,557	50,761	7,962
231 University of Arkansas - Med Sci Campus	178	61	117	5
232 Medical College of Ohio at Toledo	176	60	116	20
233 University of Missouri - Rolla	176	113	63	1
234 North Dakota State University	173	127	46	7
235 Central Michigan University	167	149	18	0
236 Colorado School of Mines	166	76	90	0
237 University of Southwestern Louisiana	160	106	54	3
238 University of Alaska at Fairbanks	158	114	44	1
239 Marshall University	156	82	74	0
240 Univ of Texas SW Medical Ctr at Dallas	152	152	0	115
Total, 1st 240 insts.	149,980	98,597	51,383	8,114

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-4. Female graduate science and engineering students by enrollment status and female postdoctoral appointees in doctorate-granting institutions, ranked by female graduate science and engineering students: 1991**

Page 5 of 6

Institutional ranking	Total female students	Female full-time students	Female part-time students	Female postdoctoral appointees
241 Worcester Polytechnic Institute	151	63	88	3
242 SUNY - Coll of Env Science and Forestry	151	82	69	2
243 Montana State University	150	121	29	6
244 College of William and Mary	146	127	19	1
245 Univ of Med and Dent of New Jersey	144	135	9	53
246 Clark University	137	122	15	1
247 Indiana State University	136	97	39	0
248 Lamar University	134	97	37	3
249 Sam Houston State University	134	78	56	0
250 Medical College of Georgia	132	69	63	15
Total, 1st 250 insts.	151,395	99,588	51,807	8,198
251 University of Tennessee, Memphis	129	76	53	10
252 University of Puerto Rico	127	123	4	0
253 Forest Institute of Prof Psych	123	79	44	0
254 Baylor College of Medicine	122	122	0	83
255 University of Missouri - St Louis	121	89	32	5
256 East Texas State University	121	48	73	0
257 The Wright Institute	119	119	0	0
258 University of North Dakota	119	97	22	2
259 Bryn Mawr College	115	33	82	0
260 Tennessee Technological University	114	55	59	0
Total, 1st 260 insts.	152,605	100,429	52,176	8,298
261 Clark Atlanta University	113	79	34	1
262 Dartmouth College	113	111	2	27
263 Wake Forest University	112	100	12	28
264 Michigan Technological University	108	100	8	0
265 University of South Dakota	104	88	16	0
266 New York Medical College	104	28	76	13
267 Northeast Louisiana University	102	76	26	0
268 Florida A & M University	98	67	31	2
269 Spalding University	95	15	80	0
270 University of the Pacific	94	89	5	0
Total, 1st 270 insts.	153,648	101,182	52,466	8,369
271 Biola University	92	83	9	0
272 University of Tulsa	89	63	26	0
273 US Naval Postgraduate School	88	38	0	0
274 Chicago School of Prof Psych	87	46	41	0
275 Eastern Virginia Medical School	86	77	9	0
276 Xavier University	84	55	29	5
277 University of Health Sciences (Chicago)	81	79	2	4
278 Stephen F. Austin State University	74	46	28	0
279 Emerson College	72	45	27	0
280 University of Northern Iowa	70	65	5	0
Total, 1st 280 insts.	154,471	101,829	52,642	8,378
281 Golden Gate University	70	4	66	0
282 Indiana University of Pennsylvania	66	50	16	0
283 Oregon Health Sciences University	61	60	1	15
284 Texas Christian University	61	53	8	1
285 Creighton University	61	18	43	3
286 The Medical College of Pennsylvania	59	49	10	15
287 New Mexico Institute of Mining and Tech	58	57	1	0
288 Uniformed Serv Univ of the Hlth Science	57	57	0	6
289 Wesleyan University	54	52	2	4
290 Clarkson University	53	53	0	8
Total, 1st 290 insts.	155,071	102,282	52,789	8,430
291 Medical University of South Carolina	53	51	2	28
292 Univ. of Osteopathic Med & Health Sci	51	51	0	0
293 Louisiana Tech University	49	40	9	0
294 CUNY Mt. Sinai Sch of Medicine	48	48	0	0
295 Mayo Graduate School	47	37	10	36
296 Oregon Grad Inst of Science & Technolog	45	36	9	3
297 Alfred University	42	40	2	0
298 Rockefeller University	41	41	0	70
299 SUNY - Health Sci Ctr at Brooklyn	40	40	0	9
300 Catholic University of Puerto Rico	40	36	4	0
Total, 1st 300 insts.	155,527	102,702	52,825	8,576

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-4. Female graduate science and engineering students by enrollment status and female postdoctoral appointees in doctorate-granting institutions, ranked by female graduate science and engineering students: 1991**

Page 6 of 6

Institutional ranking	Total female students	Female full-time students	Female part-time students	Female postdoctoral appointees
301 SUNY - Health Sci Ctr at Syracuse	39	31	8	3
302 Medical College of Wisconsin	38	34	4	20
303 South Dakota School of Mines and Tech	37	35	2	0
304 Albany Medical College Grad Studies Pro	36	31	5	6
305 Air Force Institute of Technology	33	33	0	0
306 University of Maryland Eastern Shore	31	21	10	0
307 Union College(NY)	26	5	21	0
308 CUNY Herbert H. Lehman College	26	4	22	0
309 Mass College of Pharmacy/Allied Health	24	23	1	0
310 Meharry Medical College	23	23	0	0
Total, 1st 310 insts.	155,840	102,942	52,898	8,605
311 Baylor College of Dentistry	22	17	5	1
312 Philadelphia Coll of Pharmacy and Sci	22	18	4	0
313 University of New England	19	13	6	0
314 Rand Graduate School of Policy Studies	19	19	0	0
315 Mercer University	18	0	18	0
316 Institute of Paper Science & Technology	16	16	0	0
317 SUNY State College of Optometry	15	5	10	0
318 Maharishi International University	15	15	0	0
319 Ponce School of Medicine	10	4	6	0
320 Texas College of Osteopathic Medicine	10	10	0	6
Total, 1st 320 insts.	156,006	103,059	52,947	8,612
321 Institute of Textile Technology	5	5	0	0
322 Smith College	4	0	4	0
323 Providence College	0	0	0	0
324 Univ of Texas MD Anderson Cancer Center	0	0	0	44
325 Phila College of Osteopathic Medicine	0	0	0	4
326 West Virginia Sch of Osteopathic Med	0	0	0	0
327 NE Ohio Univ Med School	0	0	0	0
328 Kirksville College of Osteopathic Med	0	0	0	0
329 Univ of Health Sciences (Kansas City)	0	0	0	0
330 Woods Hole Oceanographic Institution	0	0	0	4
Total, 1st 330 insts.	156,015	103,064	52,951	8,664
331 Morehouse School of Medicine	0	0	0	4
332 Chicago Coll of Osteo Medicine	0	0	0	1
333 Charles R. Drew Univ of Medicine & Sci	0	0	0	0
Total, 1st 333 insts.	156,015	103,064	52,951	8,669

NOTE: Includes medical schools

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table F-5. Minority graduate science and engineering students in doctorate-granting institutions, by racial/ethnic background, ranked by total minority graduate science and engineering students: 1991**

Page 1 of 6

Institutional ranking	Total minority students	Black non-Hispanic	American Indian/Alaskan	Asian/Pacific Islander	Hispanic
Total, all Institutions	41,795	12,343	1,207	16,911	11,328
1 University of Puerto Rico - Rio Piedras	1,160	0	0	0	1,160
2 University of Southern California	963	127	5	608	223
3 University of Calif at Los Angeles	820	98	22	504	196
4 University of Houston-University Park	805	106	14	550	135
5 University of Calif at Berkeley	760	147	20	396	197
6 University of Puerto Rico Med Sci Campus	720	0	0	0	720
7 Stanford University	698	92	17	441	148
8 University of Michigan	552	210	10	200	132
9 New Jersey Institute of Technology	517	56	0	416	45
10 University of Illinois at Chicago	515	176	12	241	86
Total, 1st 10 insts.	7,510	1,012	100	3,356	3,042
11 Rutgers the State University	493	158	85	165	85
12 New York University	486	227	2	146	111
13 Howard University	477	451	0	25	1
14 George Washington University	460	188	17	160	95
15 University of Illinois at Urbana	457	81	5	312	59
16 Massachusetts Institute of Technology	453	74	6	312	61
17 De Paul University	422	134	1	232	55
18 CUNY City College	408	136	1	187	84
19 University of Hawaii at Manoa	405	12	13	368	12
20 University of Maryland - College Park	405	170	6	178	51
Total, 1st 20 insts.	11,976	2,643	236	5,441	3,656
21 Georgia Institute of Technology	402	180	4	129	89
22 University of Colorado	389	71	21	170	127
23 Long Island University	386	243	1	39	103
24 Harvard University	376	121	17	169	69
25 Texas A & M University	373	88	12	95	198
26 Florida International University	372	107	0	34	231
27 Columbia University Teachers College	370	183	2	84	101
28 Caribbean Center for Advanced Studies	365	0	0	0	365
29 Ohio State University	357	152	14	111	80
30 University of Washington	347	50	18	215	64
Total, 1st 30 insts.	15,713	3,818	325	6,487	5,083
31 Wayne State University	340	174	2	149	15
32 Columbia University Main Division	329	65	2	192	70
33 San Diego State University	318	61	6	132	119
34 Pennsylvania State University	305	92	13	147	53
35 University of Florida	303	112	13	74	104
36 Univ of North Carolina at Chapel Hill	302	130	13	115	44
37 George Mason University	299	83	6	170	40
38 University of Wisconsin - Madison	293	44	16	148	85
39 Cornell University	289	59	9	156	65
40 University of Calif at Davis	278	43	8	146	81
Total, 1st 40 insts.	18,769	4,681	413	7,916	5,759
41 University of South Florida	276	91	3	57	125
42 Univ of Texas at El Paso	269	20	0	23	226
43 Univ of Texas at Austin	269	37	9	71	152
44 University of Minnesota	261	60	3	165	33
45 New York Institute of Technology	258	80	6	112	60
46 University of Puerto Rico	254	0	0	0	254
47 Indiana University	254	111	3	98	42
48 Louisiana State University System	249	100	3	112	34
49 Purdue University	247	75	4	117	51
50 University of Calif at San Diego	246	23	8	154	61
Total, 1st 50 insts.	21,352	5,278	452	8,825	6,797
51 North Carolina State Univ at Raleigh	244	122	7	94	21
52 University of Miami	242	51	0	48	143
53 Virginia Polytechnic Inst and State Univ	238	71	1	132	34
54 Univ of Texas at Arlington	238	29	5	162	42
55 Arizona State University	228	35	18	58	117
56 Illinois Institute of Technology	228	65	1	120	42
57 University of Calif at Irvine	227	16	6	162	43
58 University of Arizona	226	25	19	77	105
59 Georgia State University	225	151	1	56	17
60 University of New Mexico	225	11	27	26	161
Total, 1st 60 insts.	23,673	5,854	537	9,760	7,522

See explanatory information, if any, and SOURCE(S) at end of table.

245

**Table F-5. Minority graduate science and engineering students in doctorate-granting institutions, by racial/ethnic background, ranked by total minority graduate science and engineering students: 1991**

Page 2 of 6

Institutional ranking	Total minority students	Black non-Hispanic	American Indian/Alaskan	Asian/Pacific Islander	Hispanic
61 SUNY - Stony Brook	224	49	4	125	46
62 Polytechnic University	223	47	0	148	28
63 University of Oklahoma	221	70	79	42	30
64 Drexel University	219	33	5	156	25
65 Santa Clara University	218	7	1	201	9
66 Temple University	212	91	8	74	39
67 Michigan State University	210	102	9	48	51
68 Stevens Institute of Technology	209	22	0	153	34
69 University of Pittsburgh	208	81	12	86	29
70 Texas Woman's University	203	99	1	42	61
Total, 1st 70 insts.	25,820	6,455	656	10,835	7,874
71 Northwestern University	201	59	3	106	33
72 CUNY Hunter College	200	106	2	43	49
73 The American University	198	96	7	45	50
74 University of Pennsylvania	195	60	0	101	34
75 Johns Hopkins University	194	44	0	119	31
76 SUNY - Buffalo	194	45	14	64	51
77 University of Massachusetts	187	53	2	63	69
78 Clark Atlanta University	185	183	0	1	1
79 Boston University	185	39	2	103	41
80 Yale University	181	39	4	112	26
Total, 1st 80 insts.	27,740	7,179	690	11,612	8,259
81 Virginia Commonwealth University	180	140	4	24	12
82 Pace University	179	57	2	84	36
83 University of Virginia	175	83	2	61	29
84 Florida State University	173	89	9	35	40
85 Univ of Texas Hlth Sci Ctr at Houston	172	59	4	43	66
86 University of Chicago	168	38	4	77	49
87 University of Massachusetts Lowell	164	34	3	107	20
88 University of Cincinnati	162	80	3	45	34
89 University of Calif at Santa Barbara	161	25	5	83	48
90 University of Calif at San Francisco	159	23	3	87	46
Total, 1st 90 insts.	29,433	7,807	729	12,258	8,639
91 University of South Carolina	157	100	3	32	22
92 University of Akron	153	107	4	27	15
93 Univ of Texas at Dallas	153	36	2	84	31
94 Catholic University of America	152	48	4	84	16
95 Cleveland State University	151	56	0	85	10
96 CUNY Graduate School and Univ Center	151	65	0	31	55
97 Florida A & M University	147	119	0	21	7
98 University of Tennessee at Knoxville	146	78	10	40	18
99 The University of Alabama at Birmingham	146	100	1	33	12
100 Oakland University	140	34	0	103	3
Total, 1st 100 insts.	30,929	8,550	753	12,798	8,828
101 Old Dominion University	137	70	2	51	14
102 University of Wisconsin - Milwaukee	134	55	12	29	38
103 Princeton University	133	33	0	75	25
104 New Mexico State University	130	12	7	13	98
105 Rensselaer Polytechnic Institute	128	28	1	70	29
106 Calif Sch of Prof Psych - Los Angeles	128	48	6	28	46
107 Western Michigan University	128	86	7	24	11
108 SUNY - Albany	125	62	3	27	33
109 University of Central Florida	119	32	2	44	41
110 University of Louisville	118	45	4	59	10
Total, 1st 110 insts.	32,209	9,021	797	13,218	9,173
111 Auburn University	116	77	5	16	18
112 Northern Arizona University	115	23	25	8	59
113 Southern Methodist University	114	16	0	81	17
114 Wright State University	114	49	3	48	14
115 Oklahoma State University	113	31	25	37	20
116 Colorado State University	113	17	10	50	36
117 University of Connecticut	112	31	1	61	19
118 Southern Illinois Univ at Carbondale	112	70	4	22	16
119 Syracuse University	112	35	0	56	21
120 Memphis State University	110	75	2	29	4
Total, 1st 120 insts.	33,340	9,445	872	13,626	9,397

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-5. Minority graduate science and engineering students in doctorate-granting institutions, by racial/ethnic background, ranked by total minority graduate science and engineering students: 1991**

Page 3 of 6

Institutional ranking	Total minority students	Black non-Hispanic	American Indian/Alaskan	Asian/Pacific Islander	Hispanic
121 SUNY - Binghamton	109	48	2	38	21
122 University of Iowa	108	42	0	43	23
123 University of Calif at Santa Cruz	108	17	2	42	47
124 University of Maryland - Balt Prof Sch	108	64	1	31	12
125 Nova University	108	40	5	10	53
126 Case Western Reserve University	107	31	9	51	16
127 Mississippi State University	107	47	3	42	15
128 University of Nebraska - Lincoln	107	17	3	75	12
129 University of Detroit	106	72	1	27	6
130 University of Mississippi	105	82	4	17	2
Total, 1st 130 insts.	34,413	9,905	902	14,002	9,604
131 Emory University	104	65	1	28	10
132 University of Missouri - Columbia	103	50	3	30	20
133 University of Georgia	101	42	4	39	16
134 Washington State University	99	23	10	40	26
135 Portland State University	93	25	8	49	11
136 University of Kentucky	92	38	4	34	16
137 University of Denver	92	28	3	23	38
138 University of Calif at Riverside	91	9	3	44	35
139 University of Maryland - Baltimore Cnty	91	56	0	26	9
140 Adelphi University	89	38	1	33	17
Total, 1st 140 insts.	35,368	10,279	939	14,348	9,802
141 University of Delaware	89	51	1	32	5
142 Carnegie-Mellon University	88	27	2	47	12
143 University of Utah	88	3	1	66	18
144 University of Kansas	85	21	4	40	20
145 Lamar University	83	13	0	53	17
146 Washington University	82	25	2	43	12
147 St. Louis University	82	42	0	22	18
148 Duke University	80	30	1	30	19
149 Wichita State University	78	26	3	34	15
150 Fairleigh Dickinson University	78	37	2	28	11
Total, 1st 150 insts.	36,201	10,554	955	14,743	9,949
151 Brown University	76	19	2	41	14
152 The University of Alabama in Huntsville	75	21	1	45	8
153 California Institute of Technology	75	3	0	68	8
154 South Dakota School of Mines and Tech	75	0	0	75	0
155 Northeast Louisiana University	74	12	0	61	1
156 Tulane University of Louisiana	74	37	4	9	24
157 Villanova University	72	23	0	40	9
158 Loyola University of Chicago	72	23	1	29	19
159 Oregon State University	71	8	5	42	16
160 University of Rochester	71	17	3	40	11
Total, 1st 160 insts.	36,936	10,717	971	15,189	10,059
161 Northeastern University	69	10	5	41	13
162 US International University	69	24	4	10	31
163 St John's University	68	22	1	21	24
164 Antioch University	68	26	4	11	27
165 Tufts University	67	17	0	38	12
166 University of South Alabama	67	48	3	11	5
167 University of Rhode Island	67	9	2	43	13
168 Univ of Texas Hlth Sci Ctr San Antonio	66	7	1	24	34
169 Hahnemann University	66	16	0	41	9
170 Bowling Green State University	65	37	1	9	18
Total, 1st 170 insts.	37,608	10,933	992	15,438	10,245
171 Fordham University	64	16	0	6	42
172 Calif Sch of Prof Psych-Berkeley/Alamed	64	23	2	23	16
173 Loma Linda University	63	17	3	34	9
174 New School for Social Research	63	24	0	10	29
175 Univ of North Carolina at Greensboro	63	40	5	7	11
176 Texas Tech University	63	10	3	9	41
177 Calif Sch of Prof Psych - San Diego	63	11	3	5	44
178 Clemson University	63	39	0	16	8
179 Florida Institute of Technology	62	13	2	17	30
180 North Dakota State University	62	8	4	40	10
Total, 1st 180 insts.	38,238	11,134	1,014	15,605	10,485

See explanatory information, if any, and SOURCE(S) at end of table.



**Table F-5. Minority graduate science and engineering students in doctorate-granting institutions, by racial/ethnic background, ranked by total minority graduate science and engineering students: 1991**

Page 4 of 6

Institutional ranking	Total minority students	Black non-Hispanic	American Indian/Alaskan	Asian/Pacific Islander	Hispanic
181 The University of Alabama	62	29	0	28	5
182 University of Missouri - Rolla	62	8	1	45	8
183 Georgetown University	61	7	0	40	14
184 Florida Atlantic University	60	18	0	14	28
185 Lehigh University	59	20	0	25	14
186 University of Missouri - Kansas City	59	19	5	23	12
187 Union Institute	58	16	3	11	28
188 Claremont Univ Center & Graduate School	58	5	41	6	6
189 Northern Illinois University	57	25	3	15	14
190 University of North Texas	57	19	1	16	21
Total, 1st 190 insts.	38,831	11,300	1,068	15,828	10,635
191 Utah State University	57	4	15	30	8
192 Kansas State University	57	15	2	11	29
193 Univ of Texas Med Branch at Galveston	56	14	0	27	15
194 Iowa State University of Sci & Tech	56	30	3	11	12
195 Yeshiva University	55	11	1	14	29
196 University of Notre Dame	55	12	0	19	24
197 Vanderbilt University	55	25	3	20	7
198 Baylor University	54	16	1	17	20
199 Andrews University	53	29	2	11	11
200 University of Southern Mississippi	53	31	0	20	2
Total, 1st 200 insts.	39,382	11,487	1,095	16,008	10,792
201 West Virginia University	53	26	0	21	6
202 Calif Sch of Prof Psych - Fresno	53	15	3	14	21
203 Rice University	52	10	1	27	14
204 Catholic University of Puerto Rico	52	0	0	0	52
205 University of Idaho	50	4	3	28	15
206 Golden Gate University	50	29	1	12	8
207 University of Wyoming	49	2	17	22	8
208 Illinois State University	49	17	0	29	3
209 University of Dayton	48	18	1	17	12
210 University of Nevada at Reno	47	5	2	26	14
Total, 1st 210 Insts.	39,885	11,613	1,123	16,204	10,945
211 Meharry Medical College	46	44	0	1	1
212 South Dakota State University	44	3	3	37	1
213 Fuller Theological Seminary	43	9	0	24	10
214 University of Arkansas	42	22	6	7	7
215 Boston College	41	13	0	21	7
216 Marquette University	40	15	0	15	10
217 Xavier University	36	23	0	7	6
218 University of Oregon	35	4	2	15	14
219 Rush University	35	17	0	16	2
220 University of Missouri - St Louis	34	14	1	7	12
Total, 1st 220 insts.	40,281	11,777	1,135	16,354	11,015
221 Kent State University	34	24	1	5	4
222 University of Toledo	34	17	1	10	6
223 Worcester Polytechnic Institute	33	2	0	29	2
224 Louisiana Tech University	33	3	0	28	2
225 The Fielding Institute	33	16	2	5	10
226 Sam Houston State University	33	12	1	12	8
227 Pacific Grad School of Prof Psych	31	8	5	9	9
228 East Carolina University	30	24	3	1	2
229 Hofstra University	29	16	0	9	4
230 Medical College of Georgia	29	19	0	5	5
Total, 1st 230 insts.	40,600	11,918	1,148	16,467	11,067
231 College of William and Mary	27	16	0	6	5
232 University of Tennessee, Memphis	27	15	0	12	0
233 Univ of Texas SW Medical Ctr at Dallas	26	3	1	15	7
234 Texas College of Osteopathic Medicine	26	0	0	23	3
235 University of Northern Colorado	25	7	1	7	10
236 Univ of Med and Dent of New Jersey	25	10	1	12	2
237 University of Southwestern Louisiana	24	18	0	6	0
238 University of Vermont & St Agric Colleg	24	3	0	10	11
239 SUNY - Health Sci Ctr at Brooklyn	24	6	0	15	3
240 The Wright Institute	24	9	0	9	6
Total, 1st 240 insts.	40,852	12,005	1,151	16,582	11,114

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-5. Minority graduate science and engineering students in doctorate-granting institutions, by racial/ethnic background, ranked by total minority graduate science and engineering students: 1991**

Page 5 of 6

Institutional ranking	Total minority students	Black non-Hispanic	American Indian/Alaskan	Asian/Pacific Islander	Hispanic
241 Chicago School of Prof Psych	24	7	0	6	11
242 Marshall University	24	6	1	4	13
243 CUNY Herbert H. Lehman College	24	10	0	3	11
244 University of South Dakota	23	7	4	11	1
245 Miami University	22	6	1	12	3
246 University of Tulsa	22	5	4	6	7
247 Duquesne University	22	16	1	0	5
248 Dartmouth College	22	3	1	14	4
249 Indiana State University	21	16	0	5	0
250 Seton Hall University	21	9	1	3	8
Total, 1st 250 Insts.	41,077	12,090	1,164	16,646	11,177
251 Central Michigan University	20	9	2	6	3
252 Colorado School of Mines	20	5	1	3	11
253 University of North Dakota	20	2	2	15	1
254 Michigan Technological University	20	3	3	9	5
255 Ohio University	20	7	6	4	3
256 University of Alaska at Fairbanks	20	1	2	13	4
257 University of Maryland Eastern Shore	20	20	0	0	0
258 East Tennessee State University	19	15	0	1	3
259 Biola University	19	4	2	7	6
260 University of Montana	19	0	4	12	3
Total, 1st 260 Insts.	41,274	12,156	1,186	16,716	11,216
261 Baylor College of Medicine	18	1	1	11	5
262 Clark University	18	7	1	5	5
263 Eastern Virginia Medical School	17	15	0	0	2
264 University of the Pacific	17	6	1	8	2
265 Indiana University of Pennsylvania	17	13	1	2	1
266 Idaho State University	16	2	2	8	4
267 Medical University of South Carolina	16	2	0	14	0
268 University of Nebraska Medical Center	16	3	0	12	1
269 Ponce School of Medicine	15	0	0	0	15
270 Medical College of Wisconsin	15	2	0	11	2
Total, 1st 270 Insts.	41,439	12,207	1,192	16,787	11,253
271 East Texas State University	15	5	0	7	3
272 Rockefeller University	14	4	0	9	1
273 Stephen F. Austin State University	14	3	0	6	5
274 SUNY - Coll of Env Science and Forestry	14	5	1	3	5
275 Tennessee Technological University	14	12	1	0	1
276 Brandeis University	14	2	0	9	3
277 Forest Institute of Prof Psych	13	6	2	3	2
278 Montana State University	13	1	3	7	2
279 Thomas Jefferson University	13	2	1	9	1
280 Oregon Grad Inst of Science & Technolog	13	1	0	11	1
Total, 1st 280 Insts.	41,576	12,248	1,200	16,851	11,277
281 New York Medical College	12	7	1	3	1
282 Texas Christian University	12	4	0	1	7
283 University of New Hampshire	12	1	0	6	5
284 Univ of Arkansas - Med Sci Campus	12	11	0	1	0
285 Ball State University	11	9	0	0	2
286 University of Health Sciences (Chicago)	11	2	0	8	1
287 Uniformed Serv Univ of the Hlth Science	11	1	2	7	1
288 New Mexico Institute of Mining and Tech	10	0	1	0	9
289 Baylor College of Dentistry	10	1	0	3	6
290 CUNY Mt. Sinai Sch of Medicine	10	1	0	7	2
Total, 1st 290 Insts.	41,687	12,285	1,204	16,887	11,311
291 Air Force Institute of Technology	9	9	0	0	0
292 Mercer University	9	8	0	0	1
293 Wake Forest University	8	4	0	3	1
294 University of Maine	8	1	1	4	2
295 Oregon Health Sciences University	7	0	0	5	2
296 Wesleyan University	6	3	0	1	2
297 SUNY - Health Sci Ctr at Syracuse	6	4	0	2	0
298 Spalding University	5	4	1	0	0
299 Albany Medical College Grad Studies Pro	4	1	0	2	1
300 Medical College of Ohio at Toledo	4	2	0	1	1
Total, 1st 300 Insts.	41,753	12,321	1,206	16,905	11,321

See explanatory information, if any, and SOURCE(S) at end of table.

236

**Table F-5. Minority graduate science and engineering students in doctorate-granting institutions, by racial/ethnic background, ranked by total minority graduate science and engineering students: 1991**

Page 6 of 6

Institutional ranking	Total minority students	Black non-Hispanic	American Indian/Alaskan	Asian/Pacific Islander	Hispanic
301 Bryn Mawr College	4	2	1	0	1
302 Institute of Paper Science & Technology	4	2	0	2	0
303 Creighton University	3	1	0	0	2
304 University of Northern Iowa	3	3	0	0	0
305 Brigham Young University	3	3	0	0	0
306 The Medical College of Pennsylvania	3	2	0	1	0
307 SUNY State College of Optometry	3	0	0	2	1
308 Rand Graduate School of Policy Studies	3	1	0	2	0
309 Alfred University	3	2	0	0	1
310 Union College(NY)	3	0	0	2	1
Total, 1st 310 insts.	41,785	12,337	1,207	16,914	11,327
311 Maharishi International University	2	2	0	0	0
312 Institute of Textile Technology	2	2	0	0	0
313 Univ. of Osteopathic Med & Health Sci	1	1	0	0	0
314 Mass College of Pharmacy/Allied Health	1	0	0	1	0
315 Philadelphia Coll of Pharmacy and Sci	1	0	0	1	0
316 Smith College	1	0	0	1	0
317 Clarkson University	1	0	0	0	1
318 Emerson College	1	1	0	0	0
319 Providence College	0	0	0	0	0
320 California Institute of Integral Studie	0	0	0	0	0
Total, 1st 320 Insts.	41,795	12,343	1,207	16,917	11,328
321 NE Ohio Univ Med School	0	0	0	0	0
322 Chicago Coll of Osteo Medicine	0	0	0	0	0
323 West Virginia Sch of Osteopathic Med	0	0	0	0	0
324 Morehouse School of Medicine	0	0	0	0	0
325 Mayo Graduate School	0	0	0	0	0
326 Woods Hole Oceanographic Institution	0	0	0	0	0
327 US Naval Postgraduate School	0	0	0	0	0
328 University of New England	0	0	0	0	0
329 Phila College of Osteopathic Medicine	0	0	0	0	0
330 Kirksville College of Osteopathic Med	0	0	0	0	0
Total, 1st 330 Insts.	41,795	12,343	1,207	16,917	11,328
331 Univ of Texas MD Anderson Cancer Center	0	0	0	0	0
332 Univ of Health Sciences (Kansas City)	0	0	0	0	0
333 Charles R. Drew Univ of Medicine & Sci	0	0	0	0	0
Total, 1st 333 Insts.	41,795	12,343	1,207	16,917	11,328

NOTE: Includes medical schools

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table F-6. Graduate science and engineering students with U.S. citizenship, by enrollment status and postdoctoral appointees with U.S. citizenship in doctorate-granting institutions, ranked by U.S. citizen graduate science and engineering students: 1991**

Page 1 of 6

Institutional ranking	U.S. graduate students	U.S. full-time students	U.S. part-time students	U.S. postdoc- toral appoin- tees
Total, all institutions	304,444	194,839	109,605	15,590
1 University of Minnesota	4,111	3,283	828	236
2 University of Wisconsin - Madison	4,059	3,354	705	283
3 University of Colorado	3,987	2,861	1,126	218
4 University of Southern California	3,787	2,001	1,786	96
5 University of Michigan	3,785	3,136	649	283
6 University of Calif at Berkeley	3,686	3,686	0	359
7 University of Washington	3,569	2,768	801	594
8 Ohio State University	3,506	2,820	686	133
9 George Washington University	3,430	997	2,433	14
10 Indiana University	3,420	2,166	1,254	223
Total, 1st 10 insts.	37,340	27,072	10,268	2,439
11 Rutgers the State University	3,339	1,475	1,864	85
12 Stanford University	3,257	2,961	296	563
13 University of Illinois at Urbana	3,242	3,239	3	122
14 Texas A & M University	3,134	2,509	625	83
15 Pennsylvania State University	3,117	2,065	1,052	109
16 Univ of Texas at Austin	3,084	2,476	608	98
17 University of Pittsburgh	3,046	1,538	1,508	117
18 University of Calif at Los Angeles	3,028	3,027	1	351
19 Massachusetts Institute of Technology	2,808	2,763	45	222
20 New York University	2,702	1,098	1,604	67
Total, 1st 20 insts.	68,097	50,223	17,874	4,256
21 Univ of North Carolina at Chapel Hill	2,631	2,232	399	237
22 University of Houston-University Park	2,602	928	1,674	10
23 University of Florida	2,574	1,610	964	124
24 Harvard University	2,531	2,408	123	1,174
25 Purdue University	2,515	2,231	284	73
26 University of Maryland - College Park	2,460	1,349	1,111	80
27 SUNY - Buffalo	2,375	1,388	987	125
28 Georgia Institute of Technology	2,365	1,761	604	25
29 University of Illinois at Chicago	2,341	1,133	1,208	53
30 University of Arizona	2,318	1,879	439	169
Total, 1st 30 insts.	92,809	67,142	25,867	6,326
31 Virginia Polytechnic Inst and State Uni	2,281	1,774	507	39
32 University of Tennessee at Knoxville	2,277	1,201	1,076	48
33 University of Massachusetts	2,268	990	1,278	106
34 North Carolina State Univ at Raleigh	2,239	1,713	526	79
35 Arizona State University	2,128	1,018	1,110	35
36 Cornell University	2,096	2,096	0	224
37 Wayne State University	2,087	871	1,216	64
38 University of South Florida	2,070	933	1,137	10
39 San Diego State University	2,057	997	1,060	4
40 George Mason University	2,046	384	1,662	0
Total, 1st 40 insts.	114,358	79,119	35,239	6,935
41 Boston University	2,025	1,247	778	24
42 University of Calif at Davis	2,010	1,893	117	105
43 Northeastern University	1,985	703	1,282	16
44 University of Cincinnati	1,873	1,097	776	103
45 University of Connecticut	1,865	1,136	729	36
46 Michigan State University	1,848	1,535	313	67
47 Columbia University Teachers College	1,834	742	1,092	0
48 University of Kansas	1,810	720	1,090	38
49 Louisiana State University System	1,784	1,292	492	135
50 Columbia University Main Division	1,774	1,218	556	210
Total, 1st 50 insts.	133,166	90,702	42,464	7,669
51 University of Oklahoma	1,734	933	801	26
52 University of Virginia	1,713	1,551	162	137
53 Virginia Commonwealth University	1,698	1,023	675	79
54 University of Pennsylvania	1,636	1,426	210	384
55 Iowa State University of Sci & Tech	1,584	1,217	367	60
56 Texas Woman's University	1,570	679	891	1
57 Antioch University	1,568	1,182	386	0
58 University of Massachusetts Lowell	1,547	413	1,134	10
59 SUNY - Stony Brook	1,535	927	608	84
60 Colorado State University	1,531	1,146	385	108
Total, 1st 60 insts.	149,282	101,199	48,083	8,558

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-6. Graduate science and engineering students with U.S. citizenship, by enrollment status and postdoctoral appointees with U.S. citizenship in doctorate-granting institutions, ranked by U.S. citizen graduate science and engineering students: 1991**

Page 2 of 6

Institutional ranking	U.S. graduate students	U.S. full-time students	U.S. part-time students	U.S. postdoc- toral appoin- tees
61 University of Kentucky	1,529	1,100	429	97
62 University of Wisconsin - Milwaukee	1,522	820	702	9
83 University of New Mexico	1,507	944	563	30
64 University of Iowa	1,496	1,098	398	191
65 Rensselaer Polytechnic Institute	1,471	889	582	18
66 University of South Carolina	1,455	825	630	29
67 University of Utah	1,442	1,018	424	70
68 Univ of Texas at Arlington	1,438	426	1,012	7
69 University of Calif at San Diego	1,417	1,280	137	336
70 Polytechnic University	1,396	264	1,132	14
Total, 1st 70 insts.	163,955	109,863	54,092	9,359
71 De Paul University	1,387	519	868	0
72 Yale University	1,384	1,283	101	449
73 Northwestern University	1,382	1,288	94	106
74 Drexel University	1,319	342	977	8
75 Johns Hopkins University	1,314	1,105	209	441
76 Western Michigan University	1,305	497	808	1
77 University of Hawaii at Manoa	1,298	1,011	287	27
78 Auburn University	1,292	681	631	16
79 Syracuse University	1,287	703	584	20
80 University of Central Florida	1,256	510	746	1
Total, 1st 80 insts.	177,179	117,782	59,397	10,428
81 West Virginia University	1,242	748	494	24
82 The American University	1,240	667	573	1
83 New Jersey Institute of Technology	1,226	422	804	0
84 Long Island University	1,211	351	860	0
85 University of Georgia	1,195	1,034	161	68
66 University of Nebraska - Lincoln	1,190	831	359	32
87 US Naval Postgraduate School	1,181	1,181	0	0
88 University of Missouri - Columbia	1,175	752	423	58
89 Illinois Institute of Technology	1,172	157	1,015	3
90 Temple University	1,167	836	331	30
Total, 1st 90 insts.	189,178	124,761	64,417	10,644
91 Clemson University	1,167	871	296	14
92 Washington University	1,165	846	319	286
93 Florida State University	1,164	786	378	20
94 University of Puerto Rico - Rio Piedras	1,164	781	383	2
95 University of Calif at Santa Barbara	1,156	1,141	15	49
96 Pace University	1,144	104	1,040	0
97 Case Western Reserve University	1,131	670	461	103
98 The University of Alabama at Birmingham	1,126	777	349	123
99 University of Akron	1,125	539	586	26
100 Southern Illinois Univ at Carbondale	1,125	829	296	13
Total, 1st 100 insts.	200,645	132,105	68,540	11,280
101 Carnegie-Mellon University	1,123	752	371	36
102 Stevens Institute of Technology	1,123	267	856	0
103 University of Chicago	1,107	1,107	0	277
104 Oregon State University	1,105	999	106	40
105 Duke University	1,102	1,022	80	250
106 Oklahoma State University	1,076	485	591	18
107 Georgia State University	1,075	584	491	11
108 CUNY Graduate School and Univ Center	1,074	883	191	14
109 University of Calif at Irvine	1,067	986	81	159
110 University of Rhode Island	1,066	624	442	6
Total, 1st 110 insts.	211,563	139,814	71,749	12,091
111 Old Dominion University	1,046	415	631	2
112 University of Delaware	1,017	691	326	24
113 SUNY - Albany	1,015	606	409	29
114 University of Arkansas	1,000	485	515	18
115 University of Louisville	988	448	540	8
116 Texas Tech University	962	634	328	16
117 Washington State University	949	786	163	61
118 Wright State University	947	373	574	7
119 Cleveland State University	944	295	649	13
120 University of Calif at San Francisco	944	922	22	520
Total, 1st 120 insts.	221,375	145,469	75,906	12,789

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-6. Graduate science and engineering students with U.S. citizenship, by enrollment status and postdoctoral appointees with U.S. citizenship in doctorate-granting institutions, ranked by U.S. citizen graduate science and engineering students: 1991**

Page 3 of 6

Institutional ranking	U.S. graduate students	U.S. full-time students	U.S. part-time students	U.S. postdoc- toral appoin- tees
121 University of Maryland - Balt Prof Sch	921	384	537	42
122 University of Rochester	919	785	134	146
123 SUNY - Binghamton	913	466	447	4
124 University of Miami	907	650	257	71
125 Univ of Texas at Dallas	906	333	573	6
126 Northern Arizona University	903	516	387	1
127 Nova University	901	391	510	0
128 Kansas State University	893	718	175	22
129 University of North Texas	888	500	388	3
130 Northern Illinois University	884	526	358	7
Total, 1st 130 Insts.	230,410	150,738	79,672	13,091
131 Princeton University	875	875	0	140
132 University of Dayton	874	185	689	1
133 Fairleigh Dickinson University	869	161	708	0
134 Brigham Young University	841	381	460	16
135 Memphis State University	841	462	379	6
136 Villanova University	837	149	688	0
137 University of Wyoming	836	612	224	10
138 The University of Alabama in Huntsville	835	285	550	2
139 Portland State University	833	332	501	0
140 Kent State University	831	470	361	8
Total, 1st 140 Insts.	238,882	154,650	84,232	13,274
141 Emory University	830	577	253	49
142 University of Denver	825	406	419	26
143 University of Missouri - Rolla	817	284	533	3
144 Santa Clara University	814	60	754	0
145 Tufts University	807	630	177	120
146 University of Idaho	807	353	454	13
147 St. Louis University	792	361	431	19
148 Adelphi University	789	220	569	1
149 Catholic University of America	787	180	607	8
150 Univ of Texas Hlth Sci Ctr at Houston	785	390	395	0
Total, 1st 150 Insts.	246,935	158,111	88,824	13,513
151 Tulane University of Louisiana	778	565	213	16
152 University of Maryland - Baltimore Cnty	761	346	415	7
153 Florida Institute of Technology	752	327	425	6
154 New School for Social Research	747	358	389	0
155 Wichita State University	746	200	546	0
156 Utah State University	741	604	137	14
157 Florida International University	737	229	508	3
158 New Mexico State University	727	488	239	10
159 University of Puerto Rico Med Sci Campu	722	514	208	0
160 Oakland University	719	219	500	0
Total, 1st 160 Insts.	254,365	161,961	92,404	13,569
161 Worcester Polytechnic Institute	718	240	478	1
162 Vanderbilt University	718	669	49	113
163 CUNY City College	708	164	544	9
164 CUNY Hunter College	703	218	485	3
165 Lehigh University	688	414	274	8
166 Mississippi State University	682	537	145	4
167 University of Nevada at Reno	665	518	147	22
168 Southern Methodist University	650	95	555	4
169 Colorado School of Mines	650	317	333	1
170 Loyola University of Chicago	643	329	314	11
Total, 1st 170 Insts.	261,190	165,462	95,728	13,745
171 California Institute of Technology	636	636	0	134
172 Calif Sch of Prof Psych - San Diego	617	379	238	0
173 University of Missouri - Kansas City	607	187	420	6
174 New York Institute of Technology	598	195	403	0
175 Univ of North Carolina at Greensboro	570	320	250	0
176 University of New Hampshire	568	448	120	4
177 Air Force Institute of Technology	567	567	0	0
178 The University of Alabama	565	442	123	3
179 Georgetown University	564	405	159	13
180 St John's University	556	280	276	1
Total, 1st 180 Insts.	267,038	169,321	97,717	13,906

See explanatory information, if any, and SOURCE(S) at end of table.



**Table F-6. Graduate science and engineering students with U.S. citizenship, by enrollment status and postdoctoral appointees with U.S. citizenship in doctorate-granting institutions, ranked by U.S. citizen graduate science and engineering students: 1991**

Page 4 of 6

institutional ranking	U.S. graduate students	U.S. full-time students	U.S. part-time students	U.S. postdoc- toral appoin- tees
181 Marquette University	554	236	318	3
182 Univ of Texas at El Paso	553	239	314	5
183 Boston College	553	337	216	2
184 University of Calif at Riverside	553	543	10	56
185 Hahnemann University	551	438	113	14
186 Yeshiva University	550	394	156	103
187 University of Oregon	544	511	33	71
188 University of Vermont & St Agric Colleg	541	391	150	48
189 University of Calif at Santa Cruz	532	520	12	29
190 University of Notre Dame	528	497	31	17
Total, 1st 190 insts.	272,497	173,427	99,070	14,254
191 University of Mississippi	523	420	103	5
192 University of Maine	522	383	139	6
193 Seton Hall University	521	81	440	0
194 University of Southern Mississippi	518	346	172	1
195 Ohio University	510	443	67	7
196 Florida Atlantic University	509	145	364	0
197 Illinois State University	507	326	181	1
198 University of Detroit	506	109	397	0
199 Union Institute	506	506	0	0
200 Hofstra University	498	295	203	1
Total, 1st 200 insts.	277,617	176,481	101,136	14,275
201 Rice University	497	458	39	38
202 Calif Sch of Prof Psych - Los Angeles	497	440	57	0
203 Howard University	486	301	185	6
204 Calif Sch of Prof Psych-Berkeley/Alamed	482	410	72	0
205 The Fielding Institute	478	478	0	0
206 Brown University	474	441	33	40
207 South Dakota State University	468	262	206	2
208 Baylor University	466	367	99	1
209 US International University	463	208	255	0
210 Univ of Texas Hlth Sci Ctr San Antonio	462	273	189	84
Total, 1st 210 insts.	282,390	180,119	102,271	14,446
211 Claremont Univ Center & Graduate School	460	125	335	0
212 Rush University	456	290	166	6
213 University of Montana	455	355	100	0
214 Fordham University	451	211	240	2
215 Bowling Green State University	449	343	106	6
216 Miami University	433	384	49	11
217 University of South Alabama	428	219	209	5
218 North Dakota State University	422	324	98	8
219 Idaho State University	416	278	138	0
220 Montana State University	402	351	51	23
Total, 1st 220 insts.	286,762	182,999	103,763	14,507
221 University of Toledo	393	204	189	6
222 Caribbean Center for Advanced Studies	386	282	104	0
223 East Carolina University	372	291	81	6
224 University of Alaska at Fairbanks	365	242	123	3
225 California Institute of Integral Studie	362	159	203	0
226 Duquesne University	356	185	171	0
227 East Tennessee State University	352	147	205	0
228 Calif Sch of Prof Psych - Fresno	350	299	51	0
229 Loma Linda University	346	174	172	17
230 Pacific Grad School of Prof Psych	341	136	205	0
Total, 1st 230 insts.	290,385	185,118	105,267	14,539
231 Ball State University	340	178	162	0
232 University of Northern Colorado	338	229	109	0
233 SUNY - Coll of Env Science and Forestry	309	151	158	5
234 Fuller Theological Seminary	304	229	75	0
235 College of William and Mary	298	246	52	6
236 Central Michigan University	297	247	50	0
237 Univ of Texas SW Medical Ctr at Dallas	287	286	1	159
238 Michigan Technological University	285	272	13	0
239 Sam Houston State University	278	121	157	0
240 Univ of Texas Med Branch at Galveston	278	181	97	40
Total, 1st 240 insts.	293,399	187,258	106,141	14,749

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-6. Graduate science and engineering students with U.S. citizenship, by enrollment status and postdoctoral appointees with U.S. citizenship in doctorate-granting institutions, ranked by U.S. citizen graduate science and engineering students: 1991**

Page 5 of 6

Institutional ranking	U.S. graduate students	U.S. full-time students	U.S. part-time students	U.S. postdoc- toral appoin- tees
241 Indiana State University	269	175	94	0
242 University of North Dakota	269	217	52	1
243 University of Puerto Rico	263	253	10	0
244 University of Southwestern Louisiana	253	162	91	1
245 Dartmouth College	246	242	4	43
246 East Texas State University	241	77	164	0
247 Marshall University	237	126	111	2
248 Brandeis University	237	234	3	42
249 University of Missouri - St Louis	234	151	83	8
250 University of Nebraska Medical Center	230	80	150	12
Total, 1st 250 insts.	295,878	188,975	106,903	14,858
251 Lamar University	224	122	102	0
252 Andrews University	223	133	90	0
253 University of South Dakota	219	164	55	0
254 Thomas Jefferson University	217	148	69	70
255 Tennessee Technological University	215	124	91	0
256 Wake Forest University	211	186	25	49
257 Medical College of Ohio at Toledo	210	59	151	19
258 Forest Institute of Prof Psych	206	136	70	0
259 University of Arkansas - Med Sci Campus	203	73	130	7
260 Northeast Louisiana University	200	156	44	0
Total, 1st 260 insts.	298,006	190,276	107,730	15,003
261 Baylor College of Medicine	197	197	0	130
262 Clark University	192	166	26	2
263 Stephen F. Austin State University	191	116	75	0
264 The Wright Institute	190	190	0	0
265 Univ of Med and Dent of New Jersey	188	172	16	46
266 Clark Atlanta University	187	139	48	0
267 Golden Gate University	186	9	177	0
268 Florida A & M University	180	116	64	1
269 Biola University	178	158	20	0
270 University of Tulsa	175	118	59	0
Total, 1st 270 insts.	299,870	191,655	108,215	15,182
271 Louisiana Tech University	175	111	64	0
272 Medical College of Georgia	169	78	91	6
273 University of Tennessee, Memphis	165	108	57	25
274 South Dakota School of Mines and Tech	158	141	17	1
275 Bryn Mawr College	140	38	102	0
276 New York Medical College	139	32	107	7
277 Spalding University	138	23	115	0
278 Union College(NY)	137	16	121	0
279 Xavier University	133	84	49	4
280 Chicago School of Prof Psych	128	70	58	0
Total, 1st 280 insts.	301,352	192,356	108,996	15,225
281 University of the Pacific	126	108	18	1
282 Oregon Grad Inst of Science & Technolog	125	70	55	5
283 Texas Christian University	124	102	22	1
284 Clarkson University	124	117	7	13
285 New Mexico Institute of Mining and Tech	122	121	1	0
286 Indiana University of Pennsylvania	119	79	40	0
287 Medical University of South Carolina	119	113	6	23
288 Mercer University	115	2	113	0
289 University of Northern Iowa	112	94	18	0
290 Mayo Graduate School	101	82	19	65
Total, 1st 290 insts.	302,539	193,244	109,295	15,333
291 Creighton University	101	33	68	3
292 University of Health Sciences (Chicago)	99	97	2	7
293 Eastern Virginia Medical School	99	87	12	0
294 Alfred University	92	81	11	1
295 Oregon Health Sciences University	87	85	2	20
296 The Medical College of Pennsylvania	86	68	18	12
297 Uniformed Serv Univ of the Hlth Science	86	86	0	7
298 Rockefeller University	82	82	0	63
299 Medical College of Wisconsin	78	70	8	27
300 Wesleyan University	76	71	5	4
Total, 1st 300 insts.	303,425	194,004	109,421	15,477

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-6. Graduate science and engineering students with U.S. citizenship, by enrollment status and postdoctoral appointees with U.S. citizenship in doctorate-granting institutions, ranked by U.S. citizen graduate science and engineering students: 1991**

Page 6 of 6

Institutional ranking	U.S. graduate students	U.S. full-time students	U.S. part-time students	U.S. postdoc- toral appoin- tees
301 Univ. of Osteopathic Med & Health Sci	74	74	0	0
302 Albany Medical College Grad Studies Pro	73	68	5	10
303 Emerson College	71	45	26	0
304 CUNY Mt. Sinal Sch of Medicine	71	71	0	0
305 Institute of Paper Science & Technology	64	64	0	0
306 Texas College of Osteopathic Medicine	59	59	0	6
307 University of Maryland Eastern Shore	55	27	28	0
308 SUNY - Health Sci Ctr at Brooklyn	54	53	1	22
309 Catholic University of Puerto Rico	52	48	6	0
310 CUNY Herbert H. Lehman College	51	4	47	0
Total, 1st 310 Insts.	304,049	194,515	109,534	15,515
311 Rand Graduate School of Policy Studies	50	50	0	0
312 SUNY - Health Sci Ctr at Syracuse	47	38	9	6
313 Meharry Medical College	46	48	0	1
314 Baylor College of Dentistry	46	38	8	1
315 Philadelphia Coll of Pharmacy and Sci	43	32	11	0
316 University of New England	41	25	16	0
317 Maharishi International University	41	41	0	1
318 Institute of Textile Technology	39	30	0	0
319 Mass College of Pharmacy/Allied Health	18	15	3	0
320 Ponce School of Medicine	15	7	8	0
Total, 1st 320 Insts.	304,426	194,837	109,589	15,524
321 SUNY State College of Optometry	12	1	11	1
322 Smith College	6	1	5	0
323 Phila College of Osteopathic Medicine	0	0	0	4
324 Kirksville College of Osteopathic Med	0	0	0	0
325 Univ of Health Sciences (Kansas City)	0	0	0	0
326 Woods Hole Oceanographic Institution	0	0	0	22
327 Providence College	0	0	0	0
328 Univ of Texas MD Anderson Cancer Center	0	0	0	35
329 West Virginia Sch of Osteopathic Med	0	0	0	0
330 NE Ohio Univ Med School	0	0	0	0
Total, 1st 330 Insts.	304,444	194,839	109,605	15,586
331 Chicago Coll of Osteo Medicine	0	0	0	1
332 Morehouse School of Medicine	0	0	0	3
333 Charles R. Drew Univ of Medicine & Sci	0	0	0	0
Total, 1st 333 Insts.	304,444	194,839	109,605	15,590

NOTE: Includes medical schools

SOURCE: National Science Foundation/SFS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table F-7. Graduate science and engineering students without U.S. citizenship, by enrollment status and postdoctoral appointees without U.S. citizenship in doctorate-granting institutions, ranked by non-U.S. citizen graduate science and engineering students: 1991**

Page 1 of 6

Institutional ranking	Non-U.S. graduate students	Non-U.S. full-time students	Non-U.S. part-time students	Non-U.S. postdoctoral appointees
Total, all Institutions	106,852	91,917	14,935	15,963
1 Ohio State University	1,933	1,868	65	162
2 Univ of Texas at Austin	1,887	1,734	153	147
3 Texas A & M University	1,875	1,752	123	115
4 University of Wisconsin - Madison	1,855	1,807	48	219
5 University of Southern California	1,788	1,581	207	270
6 University of Illinois at Urbana	1,696	1,696	0	141
7 University of Minnesota	1,609	1,525	84	180
8 Purdue University	1,507	1,475	32	152
9 University of Michigan	1,467	1,409	58	259
10 Massachusetts Institute of Technology	1,435	1,424	11	208
Total, 1st 10 insts.	17,052	16,271	781	1,853
11 University of Maryland - College Park	1,416	1,039	377	53
12 Cornell University	1,357	1,357	0	256
13 Pennsylvania State University	1,302	1,113	189	108
14 University of Calif at Berkeley	1,293	1,293	0	295
15 Michigan State University	1,255	1,075	180	109
16 Iowa State University of Sci & Tech	1,234	1,115	119	100
17 Columbia University Main Division	1,190	1,043	147	222
18 Arizona State University	1,190	877	313	50
19 University of Florida	1,167	803	364	170
20 Stanford University	1,165	1,145	20	407
Total, 1st 20 Insts.	29,621	27,131	2,490	3,623
21 University of Calif at Los Angeles	1,143	1,143	0	269
22 George Washington University	1,114	550	564	17
23 University of Arizona	1,073	985	88	133
24 SUNY - Buffalo	1,070	929	141	214
25 Louisiana State University System	1,064	980	84	121
26 Rutgers the State University	1,036	808	228	135
27 University of Illinois at Chicago	1,014	893	121	97
28 University of Massachusetts	994	510	484	119
29 Wayne State University	969	678	291	92
30 Georgia Institute of Technology	961	818	143	41
Total, 1st 30 Insts.	40,059	35,425	4,634	4,861
31 Harvard University	941	926	15	1,232
32 University of Iowa	924	817	107	111
33 University of Pittsburgh	898	766	132	89
34 University of Pennsylvania	897	876	21	258
35 University of Washington	885	785	100	218
36 Syracuse University	877	497	380	27
37 North Carolina State Univ at Raleigh	876	796	80	113
38 SUNY - Stony Brook	871	724	147	113
39 University of Cincinnati	848	787	61	75
40 Virginia Polytechnic Inst and State Uni	832	765	67	83
Total, 1st 40 Insts.	48,908	43,164	5,744	7,180
41 University of Missouri - Columbia	808	564	244	40
42 University of Oklahoma	795	636	159	67
43 University of Hawaii at Manoa	794	756	38	23
44 CUNY Graduate School and Univ Center	767	716	51	43
45 Oregon State University	756	738	18	33
46 Oklahoma State University	737	249	488	25
47 University of Chicago	723	723	0	178
48 Indiana University	715	659	56	144
49 University of Connecticut	686	640	46	66
50 Univ of Texas at Arlington	649	524	125	29
Total, 1st 50 insts.	56,338	49,369	6,969	7,828
51 Illinois Institute of Technology	646	400	246	13
52 Kansas State University	639	591	48	41
53 Clemson University	628	523	105	22
54 Northwestern University	625	615	10	152
55 New Jersey Institute of Technology	622	280	342	0
56 New York University	613	459	154	117
57 University of Houston-University Park	607	365	242	20
58 Boston University	606	562	44	15
59 Northeastern University	596	563	33	20
60 University of Kansas	593	341	252	103
Total, 1st 60 Insts.	62,513	54,068	8,445	8,331

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-7. Graduate science and engineering students without U.S. citizenship, by enrollment status and postdoctoral appointees without U.S. citizenship in doctorate-granting institutions, ranked by non-U.S. citizen graduate science and engineering students: 1991**

Page 2 of 6

Institutional ranking	Non-U.S. graduate students	Non-U.S. full-time students	Non-U.S. part-time students	Non-U.S. postdoctoral appointees
61 University of Utah	583	532	51	95
62 University of Calif at Davis	569	553	16	108
63 Johns Hopkins University	566	522	44	325
64 University of Nebraska - Lincoln	566	536	30	35
65 Rensselaer Polytechnic Institute	565	545	20	54
66 University of Colorado	557	511	46	101
67 CUNY City College	555	138	417	0
68 Auburn University	552	333	219	25
69 Case Western Reserve University	538	461	77	158
70 Carnegie-Mellon University	533	508	25	48
Total, 1st 70 Insts.	68,097	58,707	9,390	9,280
71 University of Tennessee at Knoxville	512	422	90	89
72 Utah State University	507	501	6	11
73 Ohio University	504	452	52	11
74 University of Rochester	503	485	18	115
75 University of Massachusetts Lowell	502	502	0	9
76 Texas Tech University	502	450	52	29
77 Princeton University	499	499	0	118
78 Southern Illinois Univ at Carbondale	493	438	55	17
79 University of Kentucky	490	467	23	145
80 California Institute of Technology	489	489	0	148
Total, 1st 80 Insts.	73,098	63,412	9,686	9,972
81 University of Calif at San Diego	485	463	22	317
82 University of Akron	484	445	39	30
83 Mississippi State University	479	432	47	15
84 Colorado State University	479	310	169	85
85 Yale University	477	475	2	448
86 University of Georgia	471	452	19	82
87 Univ of North Carolina at Chapel Hill	470	459	11	155
88 Tulane University of Louisiana	454	438	16	28
89 University of Missouri - Rolla	444	420	24	11
90 University of South Carolina	437	407	30	28
Total, 1st 90 Insts.	77,778	67,713	10,065	11,171
91 University of Delaware	430	384	46	42
92 Temple University	425	378	47	46
93 The American University	416	272	144	1
94 Santa Clara University	408	132	276	1
95 Washington State University	404	395	9	59
96 West Virginia University	401	358	43	33
97 Western Michigan University	386	237	149	0
98 University of Miami	382	346	36	56
99 University of Calif at Santa Barbara	374	374	0	101
100 SUNY - Albany	369	285	84	0
Total, 1st 100 Insts.	81,773	70,874	10,899	11,512
101 University of Toledo	358	277	81	22
102 University of Southwestern Louisiana	354	321	33	2
103 Florida Atlantic University	351	236	115	0
104 Northern Illinois University	347	282	65	15
105 Washington University	345	333	12	202
106 Florida State University	339	307	32	52
107 The University of Alabama	336	320	16	25
108 Lehigh University	334	307	27	26
109 Rice University	328	321	7	63
110 The University of Alabama at Birmingham	320	301	19	134
Total, 1st 110 Insts.	85,185	73,879	11,306	12,053
111 Duke University	310	307	3	113
112 University of Wisconsin - Milwaukee	305	198	107	19
113 University of New Mexico	303	272	31	24
114 SUNY - Binghamton	301	220	81	9
115 Vanderbilt University	298	284	14	129
116 University of Notre Dame	294	288	6	44
117 Howard University	292	186	106	14
118 Univ of Texas at Dallas	289	260	29	0
119 New York Institute of Technology	289	169	120	0
120 Lamar University	288	265	23	5
Total, 1st 120 Insts.	88,154	76,328	11,826	12,410

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-7. Graduate science and engineering students without U.S. citizenship, by enrollment status and postdoctoral appointees without U.S. citizenship in doctorate-granting institutions, ranked by non-U.S. citizen graduate science and engineering students: 1991**

Page 3 of 6

Institutional ranking	Non-U.S. graduate students	Non-U.S. full-time students	Non-U.S. part-time students	Non-U.S. postdoctoral appointees
121 Brown University	287	287	0	50
122 University of Oregon	288	272	14	30
123 University of Mississippi	282	281	1	33
124 University of Calif at Irvine	277	274	3	115
125 Florida Institute of Technology	276	202	74	7
126 University of Rhode Island	273	259	14	22
127 Polytechnic University	271	177	94	22
128 University of Arkansas	269	260	9	13
129 University of Maryland - Baltimore Cnty	265	220	45	17
130 University of South Florida	264	223	41	36
Total, 1st 130 insts.	90,904	78,783	12,121	12,755
131 University of North Texas	264	215	49	5
132 University of Idaho	261	184	77	23
133 Marquette University	254	223	31	0
134 George Mason University	253	109	144	0
135 Drexel University	247	181	66	28
136 Univ of Texas at El Paso	246	206	40	4
137 Tufts University	237	216	21	122
138 Cleveland State University	235	159	76	2
139 University of Virginia	230	229	1	94
140 New Mexico State University	229	207	22	13
Total, 1st 140 insts.	93,360	80,712	12,648	13,046
141 Kent State University	228	192	36	8
142 Old Dominion University	221	174	47	4
143 Stevens Institute of Technology	220	208	12	6
144 Portland State University	218	148	70	0
145 The University of Alabama in Huntsville	216	169	47	2
146 University of Nevada at Reno	206	200	6	16
147 Wichita State University	199	135	64	0
148 Michigan Technological University	198	188	10	0
149 Wright State University	197	127	70	11
150 Columbia University Teachers College	196	86	110	0
Total, 1st 150 insts.	95,459	82,339	13,120	13,093
151 University of Wyoming	193	179	14	14
152 North Dakota State University	193	185	8	17
153 Long Island University	192	119	73	0
154 Brandeis University	191	191	0	47
155 University of Maine	189	184	5	5
156 Georgetown University	166	168	18	66
157 University of Missouri - Kansas City	183	99	84	9
158 University of Calif at Riverside	180	179	1	74
159 Univ of Texas Hlth Sci Ctr at Houston	177	167	10	0
160 University of Puerto Rico	176	175	1	0
Total, 1st 160 insts.	97,319	83,985	13,334	13,325
161 Brigham Young University	172	112	60	33
162 University of Louisville	168	135	33	17
163 University of Denver	166	124	42	17
164 Southern Methodist University	185	76	89	13
165 Worcester Polytechnic Institute	164	127	37	11
166 University of Detroit	162	80	82	0
167 Clarkson University	162	162	0	51
168 South Dakota State University	161	151	10	0
169 US Naval Postgraduate School	159	159	0	0
170 Florida International University	156	105	51	1
Total, 1st 170 insts.	98,954	85,216	13,738	13,468
171 Emory University	156	119	37	64
172 Virginia Commonwealth University	155	145	10	59
173 Bowling Green State University	151	139	12	14
174 St John's University	149	84	65	2
175 University of Maryland - Balt Prof Sch	148	134	14	41
176 Fordham University	147	81	66	0
177 University of Central Florida	147	82	65	3
178 Fairleigh Dickinson University	136	99	37	0
179 Colorado School of Mines	131	127	4	3
180 New Mexico Institute of Mining and Tech	131	131	0	0
Total, 1st 180 insts.	100,405	86,357	14,048	13,654

See explanatory information, if any, and SOURCE(S) at end of table.



**Table F-7. Graduate science and engineering students without U.S. citizenship, by enrollment status and postdoctoral appointees without U.S. citizenship in doctorate-granting institutions, ranked by non-U.S. citizen graduate science and engineering students: 1991**

Page 4 of 6

Institutional ranking	Non-U.S. graduate students	Non-U.S. full-time students	Non-U.S. part-time students	Non-U.S. postdoctoral appointees
181 University of New Hampshire	129	125	4	0
182 Louisiana Tech University	126	120	6	0
183 Boston College	125	119	6	11
184 Villanova University	122	97	25	0
185 Loma Linda University	122	97	25	23
186 Montana State University	119	111	8	10
187 SUNY - Coll of Env Science and Forestry	118	71	47	4
188 Dartmouth College	116	116	0	34
189 South Dakota School of Mines and Tech	116	116	0	1
190 University of Alaska at Fairbanks	115	87	28	0
Total, 1st 190 insts.	101,613	87,416	14,197	13,737
191 Loyola University of Chicago	112	94	18	10
192 Memphis State University	111	87	24	2
193 San Diego State University	109	86	23	8
194 Tennessee Technological University	108	90	18	0
195 University of Vermont & St Agric Colleg	107	105	2	28
196 Baylor College of Medicine	106	106	0	123
197 East Texas State University	105	70	35	0
198 University of Tulsa	105	81	24	0
199 Indiana State University	103	82	21	1
200 Univ of Med and Dent of New Jersey	103	103	0	94
Total, 1st 200 insts.	102,682	88,320	14,362	14,003
201 De Paul University	102	70	32	0
202 New School for Social Research	101	58	43	0
203 Catholic University of America	96	43	53	16
204 University of Calif at Santa Cruz	96	96	0	19
205 Clark Atlanta University	95	61	34	8
206 CUNY Mt. Sinai Sch of Medicine	93	93	0	0
207 Claremont Univ Center & Graduate School	92	60	32	0
208 University of Calif at San Francisco	90	88	2	409
209 Ball State University	89	81	8	0
210 Oregon Grad Inst of Science & Technolog	88	82	6	7
Total, 1st 210 insts.	103,624	89,052	14,572	14,462
211 University of South Alabama	87	68	19	15
212 Sam Houston State University	64	73	11	0
213 Clark University	83	77	6	6
214 Yeshiva University	82	82	0	141
215 Medical College of Ohio at Toledo	80	79	1	35
216 St. Louis University	78	62	16	36
217 Univ of Texas Med Branch at Galveston	77	77	0	61
218 Georgia State University	74	60	14	13
219 College of William and Mary	73	70	3	5
220 University of Montana	70	57	13	2
Total, 1st 220 insts.	104,412	89,757	14,655	14,776
221 Univ of Texas SW Medical Ctr at Dallas	68	68	0	183
222 University of Southern Mississippi	66	61	5	4
223 New York Medical College	64	37	27	30
224 Illinois State University	63	53	10	2
225 SUNY - Health Sci Ctr at Brooklyn	61	61	0	19
226 Andrews University	60	50	10	0
227 Miami University	52	52	0	5
228 Wesleyan University	52	52	0	6
229 Thomas Jefferson University	52	48	4	108
230 Union Institute	50	50	0	0
Total, 1st 230 insts.	105,000	90,289	14,711	15,133
231 University of Maryland Eastern Shore	49	44	5	0
232 University of Puerto Rico - Rio Piedras	49	43	6	4
233 Medical University of South Carolina	48	47	1	59
234 University of Tennessee, Memphis	48	47	1	45
235 University of Missouri - St Louis	47	44	3	11
236 Rockefeller University	46	48	0	122
237 CUNY Hunter College	46	35	11	2
238 Duquesne University	45	33	12	0
239 University of Nebraska Medical Center	42	35	7	30
240 Texas Woman's University	39	23	16	0
Total, 1st 240 insts.	105,459	90,686	14,773	15,406

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-7. Graduate science and engineering students without U.S. citizenship, by enrollment status and postdoctoral appointees without U.S. citizenship in doctorate-granting institutions, ranked by non-U.S. citizen graduate science and engineering students: 1991**

Page 5 of 6

Institutional ranking	Non-U.S. graduate students	Non-U.S. full-time students	Non-U.S. part-time students	Non-U.S. postdoctoral appointees
241 Fuller Theological Seminary	39	31	8	0
242 Nova University	39	8	31	0
243 Baylor University	38	38	0	10
244 Central Michigan University	38	38	0	3
245 Univ of Texas Hlth Sci Ctr San Antonio	38	38	0	105
246 East Tennessee State University	38	30	8	0
247 Calif Sch of Prof Psych-Berkeley/Alamed	37	34	3	0
248 Calif Sch of Prof Psych - Los Angeles	37	31	6	0
249 Maharishi International University	37	37	0	0
250 Northern Arizona University	36	33	3	0
Total, 1st 250 Insts.	105,836	91,004	14,832	15,524
251 SUNY - Health Sci Ctr at Syracuse	35	34	1	8
252 University of North Dakota	32	31	1	3
253 University of Health Sciences (Chicago)	32	32	0	12
254 Oregon Health Sciences University	32	32	0	11
255 Uniformed Serv Univ of the Hlth Science	32	32	0	6
256 Medical College of Georgia	31	30	1	28
257 Oakland University	31	26	5	0
258 Wake Forest University	30	26	4	16
259 East Carolina University	30	27	3	14
260 Texas College of Osteopathic Medicine	30	30	0	13
Total, 1st 260 Insts.	106,151	91,304	14,847	15,635
261 US International University	29	23	6	0
262 University of Northern Colorado	29	21	8	0
263 University of the Pacific	28	28	0	0
264 Idaho State University	28	25	3	0
265 Mass College of Pharmacy/Allied Health	28	27	1	0
266 Antioch University	25	21	4	0
267 Marshall University	24	23	1	0
268 Medical College of Wisconsin	24	23	1	29
269 University of Arkansas - Med Sci Campus	23	21	2	6
270 Alfred University	23	23	0	5
Total, 1st 270 Insts.	106,412	91,539	14,873	15,675
271 The Medical College of Pennsylvania	23	23	0	23
272 Rush University	23	22	1	23
273 University of Dayton	22	18	4	1
274 Air Force Institute of Technology	22	22	0	0
275 Hahnemann University	21	16	5	12
276 Indiana University of Pennsylvania	21	21	0	0
277 Mayo Graduate School	19	19	0	80
278 Eastern Virginia Medical School	19	19	0	0
279 Seton Hall University	19	13	6	0
280 Texas Christian University	19	17	2	1
Total, 1st 280 Insts.	106,620	91,729	14,891	15,815
281 Philadelphia Coll of Pharmacy and Sci	17	15	2	3
282 University of South Dakota	17	17	0	0
283 Calif Sch of Prof Psych - Fresno	16	16	0	0
284 Creighton University	15	15	0	3
285 Univ of North Carolina at Greensboro	15	12	3	0
286 Albany Medical College Grad Studies Pro	14	14	0	4
287 Bryn Mawr College	14	6	8	0
288 SUNY State College of Optometry	10	9	1	0
289 Rand Graduate School of Policy Studies	10	10	0	0
290 Hofstra University	10	5	5	0
Total, 1st 290 Insts.	106,758	91,848	14,910	15,825
291 Biola University	10	5	5	0
292 CUNY Herbert H. Lehman College	10	6	4	0
293 Stephen F. Austin State University	10	10	0	0
294 The Wright Institute	9	9	0	0
295 Adelphi University	9	3	6	1
296 Meharry Medical College	8	8	0	4
297 Chicago School of Prof Psych	6	3	3	0
298 Institute of Paper Science & Technology	6	6	0	0
299 Golden Gate University	6	6	0	0
300 University of Northern Iowa	5	5	0	0
Total, 1st 300 Insts.	106,837	91,909	14,928	15,830

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-7. Graduate science and engineering students without U.S. citizenship, by enrollment status and postdoctoral appointees without U.S. citizenship in doctorate-granting institutions, ranked by non-U.S. citizen graduate science and engineering students: 1991**

Page 6 of 6

Institutional ranking	Non-U.S. graduate students	Non-U.S. full-time students	Non-U.S. part-time students	Non-U.S. postdoc- toral appointees
301 Union College(NY)	3	3	0	0
302 Spalding University	2	2	0	0
303 Xavier University	2	0	2	3
304 Florida A & M University	2	0	2	2
305 Baylor College of Dentistry	2	0	2	0
306 University of Puerto Rico Med Sci Campu	2	2	0	0
307 Emerson College	1	0	1	0
308 Mercer University	1	1	0	0
309 Pacific Grad School of Prof Psych	0	0	0	0
310 Catholic University of Puerto Rico	0	0	0	0
Total, 1st 310 insts.	106,852	91,917	14,935	15,835
311 The Fielding Institute	0	0	0	0
312 Chicago Coll of Osteo Medicine	0	0	0	0
313 Caribbean Center for Advanced Studies	0	0	0	0
314 Institute of Textile Technology	0	0	0	0
315 Providence College	0	0	0	0
316 Phila College of Osteopathic Medicine	0	0	0	8
317 University of New England	0	0	0	0
318 Smith College	0	0	0	0
319 Univ of Texas MD Anderson Cancer Center	0	0	0	102
320 Woods Hole Oceanographic Institution	0	0	0	9
Total, 1st 320 insts.	106,852	91,917	14,935	15,954
321 California Institute of Integral Studie	0	0	0	0
322 Forest Institute of Prof Psych	0	0	0	0
323 Ponce School of Medicine	0	0	0	0
324 Univ of Health Sciences (Kansas City)	0	0	0	0
325 West Virginia Sch of Osteopathic Med	0	0	0	0
326 Pace University	0	0	0	0
327 Calif Sch of Prof Psych - San Diego	0	0	0	0
328 Kirksville College of Osteopathic Med	0	0	0	0
329 Morehouse School of Medicine	0	0	0	9
330 Univ. of Osteopathic Med & Health Sci	0	0	0	0
Total, 1st 330 insts.	106,852	91,917	14,935	15,963
331 Northeast Louisiana University	0	0	0	0
332 NE Ohio Univ Med School	0	0	0	0
333 Charles R. Drew Univ of Medicine & Sci	0	0	0	0
Total, 1st 333 insts.	106,852	91,917	14,935	15,963

NOTE: Includes medical schools

SOURCE: National Science Foundation SRS. Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table F-8. Full-time graduate science and engineering students in doctorate-granting institutions, by source of major support, ranked by full-time graduate science and engineering students: 1991**

Page 1 of 6

Institutional ranking	Total full-time students	Federal Total	Non-Federal				
			Non-Federal total	Institutional 1/	Other U.S. support	Foreign support 2/	Self, loans, & family
Total, all institutions	286,756	61,810	147,124	120,563	20,020	6,541	77,822
1 University of Wisconsin - Madison	5,161	1,642	2,269	1,642	499	128	1,250
2 University of Calif at Berkeley	4,979	1,859	1,853	1,499	338	16	1,267
3 University of Illinois at Urbana	4,935	1,859	2,194	2,138	42	14	882
4 University of Minnesota	4,808	1,181	2,676	2,157	425	94	951
5 Ohio State University	4,688	755	2,940	2,507	277	156	993
6 University of Michigan	4,545	1,092	2,432	1,971	304	157	1,021
7 Texas A & M University	4,261	577	2,591	2,158	348	85	1,093
8 Univ of Texas at Austin	4,210	706	2,240	1,840	313	87	1,264
9 Massachusetts Institute of Technology	4,187	1,779	2,066	987	879	200	342
10 University of Calif at Los Angeles	4,170	1,159	1,766	1,430	296	40	1,245
Total, 1st 10 insts.	45,944	12,609	23,027	18,329	3,721	977	10,308
11 Stanford University	4,106	1,406	1,919	1,093	658	168	781
12 Purdue University	3,706	797	2,197	1,749	339	109	712
13 University of Southern California	3,582	724	1,470	1,061	231	178	1,388
14 University of Washington	3,553	1,293	1,573	1,119	407	47	687
15 Cornell University	3,453	1,095	1,862	1,357	358	147	496
16 University of Colorado	3,372	991	1,261	923	114	224	1,120
17 Harvard University	3,334	1,089	1,467	1,051	208	208	778
18 Pennsylvania State University	3,178	825	1,792	1,395	335	62	561
19 University of Arizona	2,864	758	1,466	1,113	245	108	640
20 Indiana University	2,825	485	1,387	1,189	127	71	953
Total, 1st 20 insts.	79,917	22,072	39,421	30,379	6,743	2,299	18,424
21 Univ of North Carolina at Chapel Hill	2,691	916	1,188	960	197	31	587
22 Michigan State University	2,610	529	1,606	1,364	189	53	475
23 Georgia Institute of Technology	2,579	547	1,311	1,023	231	57	721
24 Virginia Polytechnic Inst and State Uni	2,539	449	1,533	1,286	207	40	557
25 North Carolina State Univ at Raleigh	2,509	678	1,365	1,053	248	64	466
26 University of Calif at Davis	2,446	392	1,623	1,194	385	44	431
27 University of Florida	2,413	484	1,668	1,234	425	9	261
28 University of Maryland - College Park	2,388	658	1,253	1,095	116	42	477
29 Iowa State University of Sci & Tech	2,332	521	1,603	1,141	376	86	208
30 SUNY - Buffalo	2,317	490	988	817	118	53	839
Total, 1st 30 insts.	104,741	27,736	53,559	41,546	9,235	2,778	23,446
31 University of Pittsburgh	2,304	486	1,304	1,050	82	172	514
32 University of Pennsylvania	2,302	764	903	713	101	89	635
33 Rutgers the State University	2,283	304	1,496	1,276	195	25	483
34 Louisiana State University System	2,272	270	1,477	1,285	138	54	525
35 Columbia University Main Division	2,261	765	915	746	132	37	581
36 University of Illinois at Chicago	2,026	303	1,160	975	185	0	563
37 University of Iowa	1,915	394	1,047	899	130	18	474
38 Northwestern University	1,903	547	906	621	235	50	450
39 Arizona State University	1,895	221	1,316	1,126	188	2	358
40 University of Cincinnati	1,884	330	1,425	1,238	170	17	129
Total, 1st 40 insts.	125,786	32,120	65,508	51,475	10,791	3,242	28,158
41 University of Chicago	1,830	304	1,345	1,300	30	15	181
42 Boston University	1,809	190	926	801	69	56	693
43 University of Virginia	1,780	528	905	768	129	8	347
44 University of Connecticut	1,776	254	1,031	930	92	9	491
45 University of Hawaii at Manoa	1,767	543	736	618	64	54	488
46 Yale University	1,758	630	849	711	120	18	279
47 University of Calif at San Diego	1,743	771	763	607	131	25	209
48 Oregon State University	1,737	519	883	647	120	116	335
49 SUNY - Stony Brook	1,651	492	880	807	28	45	279
50 Johns Hopkins University	1,627	531	868	736	70	62	228
Total, 1st 50 insts.	143,264	36,882	74,694	59,400	11,644	3,650	31,688
51 University of Tennessee at Knoxville	1,623	262	895	722	172	1	466
52 CUNY Graduate School and Univ Center	1,599	297	722	668	49	5	580
53 University of Oklahoma	1,569	298	803	666	122	15	468
54 University of Kentucky	1,567	265	980	814	129	37	322
55 New York University	1,557	259	778	668	82	28	520
56 University of Utah	1,550	457	718	529	171	18	375
57 Wayne State University	1,549	151	777	580	170	27	621
58 George Washington University	1,547	105	322	304	13	5	1,120
59 University of Calif at Santa Barbara	1,515	383	833	740	70	23	299
60 University of Massachusetts	1,500	376	880	744	134	2	244
Total, 1st 60 insts.	158,840	39,735	82,402	65,835	12,756	3,811	36,703

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-8. Full-time graduate science and engineering students in doctorate-granting institutions, by source of major support, ranked by full-time graduate science and engineering students: 1991**

Page 2 of 6

Institutional ranking	Total full-time students	Federal Total	Non-Federal				
			Non-Federal total	Institutional 1/	Other U.S. support	Foreign support 2/	Self, loans, & family
61 University of Georgia	1,486	311	918	811	76	31	257
62 Colorado State University	1,456	249	796	596	63	137	411
63 Rensselaer Polytechnic Institute	1,434	313	845	569	222	54	276
64 Clemson University	1,394	207	978	750	228	0	209
65 Princeton University	1,374	507	845	658	146	41	22
66 University of Nebraska - Lincoln	1,367	202	807	651	97	59	358
67 US Naval Postgraduate School	1,340	1,179	161	0	0	161	0
68 Duke University	1,329	379	780	648	105	27	170
69 University of Missouri - Columbia	1,316	214	829	692	78	59	273
70 Kansas State University	1,309	149	897	657	144	96	263
Total, 1st 70 insts.	172,645	43,445	90,258	71,867	13,915	4,476	33,942
71 University of Houston-University Park	1,293	56	736	675	61	0	501
72 University of Rochester	1,270	481	679	583	82	14	110
73 Southern Illinois Univ at Carbondale	1,267	121	844	763	50	31	302
74 Northeastern University	1,266	56	643	574	30	39	567
75 Carnegie-Mellon University	1,260	442	615	370	202	43	203
76 University of Calif at Irvine	1,260	364	681	597	68	16	215
77 University of South Carolina	1,232	265	706	573	118	15	261
78 University of New Mexico	1,216	257	532	450	49	33	427
79 Temple University	1,214	125	578	536	39	3	511
80 Antioch University	1,203	0	0	0	0	0	1,203
Total, 1st 80 insts.	185,126	45,612	96,272	76,988	14,614	4,670	43,242
81 Syracuse University	1,200	176	700	554	79	67	324
82 Washington State University	1,181	175	850	730	73	47	156
83 Washington University	1,179	432	616	495	97	24	131
84 Virginia Commonwealth University	1,168	187	458	409	42	7	523
85 University of South Florida	1,156	176	597	501	91	5	383
86 Case Western Reserve University	1,131	388	474	274	125	75	269
87 California Institute of Technology	1,125	559	543	475	59	9	13
88 West Virginia University	1,106	222	509	434	75	0	375
89 Utah State University	1,105	192	589	470	71	48	324
90 Florida State University	1,093	182	632	589	30	13	279
Total, 1st 90 insts	196,570	48,311	102,240	81,919	15,356	4,965	46,019
91 Texas Tech University	1,084	125	590	482	101	7	369
92 San Diego State University	1,083	183	297	249	27	21	603
93 The University of Alabama at Birmingham	1,078	399	411	355	48	8	268
94 University of Delaware	1,075	221	686	511	149	26	168
95 University of Kansas	1,061	127	418	351	67	0	516
96 University of Wisconsin - Milwaukee	1,018	100	534	504	26	4	384
97 University of Calif at San Francisco	1,010	410	250	185	58	7	350
98 Tulane University of Louisiana	1,003	95	659	499	9	151	249
99 University of Miami	996	228	506	422	54	30	262
100 Auburn University	994	245	546	438	92	16	203
Total, 1st 100 insts.	206,972	50,444	107,137	85,915	15,987	5,235	49,391
101 University of Akron	984	95	744	645	89	10	145
102 Mississippi State University	969	171	516	368	41	107	282
103 Vanderbilt University	953	334	537	421	87	29	82
104 Univ of Texas at Arlington	950	98	491	376	104	11	361
105 The American University	939	72	354	293	11	50	513
106 University of Massachusetts Lowell	915	53	506	453	48	5	356
107 Ohio University	895	9	794	733	53	8	92
108 SUNY - Albany	891	116	474	418	56	0	301
109 University of Rhode Island	883	187	394	309	62	23	302
110 Tufts University	846	182	356	301	53	2	308
Total, 1st 110 insts.	216,197	51,761	112,303	90,232	16,591	5,480	52,133
111 Columbia University Teachers College	828	40	266	257	9	0	522
112 University of Puerto Rico - Rio Piedras	824	90	223	221	2	0	511
113 Northern Illinois University	808	75	553	522	27	4	180
114 University of Wyoming	791	116	469	386	76	7	206
115 University of Notre Dame	785	137	577	465	94	18	71
116 University of Oregon	783	179	358	316	37	5	246
117 Rice University	779	227	422	260	149	13	130
118 The University of Alabama	762	70	515	463	45	7	177
119 University of Arkansas	745	76	523	428	82	13	146
120 Oklahoma State University	734	211	488	485	3	0	35
Total, 1st 120 insts.	224,036	52,982	116,697	94,035	17,115	5,547	54,357

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-8. Full-time graduate science and engineering students in doctorate-granting institutions, by source of major support, ranked by full-time graduate science and engineering students: 1991**

Page 3 of 6

Institutional ranking	Total full-time students	Federal Total	Non-Federal				
			Non-Federal total	Institutional 1/	Other U.S. support	Foreign support 2/	Self, loans, & family
121 Western Michigan University	734	15	334	302	13	19	385
122 Brown University	728	259	376	287	62	27	93
123 University of Calif at Riverside	722	92	471	426	23	22	159
124 Lehigh University	721	149	486	355	97	34	86
125 University of Nevada at Reno	718	137	293	256	36	1	288
126 University of North Texas	715	86	312	222	86	4	317
127 University of Missouri - Rolla	704	88	369	271	94	4	247
128 Texas Woman's University	702	47	140	130	10	0	515
129 New Jersey Institute of Technology	702	22	221	215	6	0	459
130 University of Mississippi	701	111	405	380	18	7	185
Total, 1st 130 insts.	231,183	53,988	120,104	96,879	17,560	5,665	57,091
131 Emory University	696	104	384	365	9	10	208
132 New Mexico State University	695	146	409	334	29	46	140
133 SUNY - Binghamton	686	48	418	347	59	12	220
134 Kent State University	662	97	391	385	5	1	174
135 Georgia State University	644	87	223	215	7	1	334
136 University of Calif at Santa Cruz	616	105	404	384	20	0	107
137 Univ of Texas at Dallas	593	5	374	297	77	0	214
138 University of Central Florida	592	17	300	275	25	0	275
139 Old Dominion University	589	143	271	247	21	3	175
140 Air Force Institute of Technology	589	589	0	0	0	0	0
Total, 1st 140 insts.	237,545	55,329	123,278	99,728	17,812	5,738	58,938
141 De Paul University	589	3	103	95	8	0	483
142 University of Louisville	583	20	263	248	15	0	300
143 Georgetown University	573	90	203	180	19	4	280
144 University of New Hampshire	573	115	339	306	33	0	119
145 University of Maine	567	122	336	272	36	28	109
146 University of Maryland - Baltimore Cnty	566	75	252	226	18	8	239
147 Illinois Institute of Technology	557	73	322	211	46	65	162
148 Univ of Texas Hlth Sci Ctr at Houston	557	287	104	76	28	0	166
149 Union Institute	556	46	261	244	15	2	249
150 Northern Arizona University	549	45	222	211	3	8	282
Total, 1st 150 insts.	243,215	56,205	125,683	101,797	18,033	5,853	61,327
151 Memphis State University	549	60	336	295	40	1	153
152 University of Idaho	537	118	313	224	67	22	106
153 University of Denver	530	61	287	203	53	31	182
154 Florida Institute of Technology	529	25	262	194	17	51	242
155 Drexel University	523	95	323	260	54	9	105
156 University of Maryland - Balt Prof Sch	518	174	213	170	23	20	131
157 University of Puerto Rico Med Sci Campu	516	128	124	109	14	1	264
158 North Dakota State University	509	71	308	219	66	23	130
159 Wright State University	500	63	260	236	19	5	177
160 University of Vermont & St Agric Colleg	496	133	284	229	53	2	79
Total, 1st 160 insts.	248,422	57,133	128,393	103,936	18,439	6,018	62,896
161 George Mason University	493	23	126	102	24	0	344
162 Brigham Young University	493	1	222	222	0	0	270
163 Howard University	487	88	242	198	42	2	157
164 University of Southwestern Louisiana	483	12	244	237	5	2	227
165 Bowling Green State University	482	16	416	397	18	1	50
166 University of Toledo	481	17	396	372	22	2	68
167 Portland State University	480	24	197	195	0	2	259
168 The Fielding Institute	478	0	0	0	0	0	478
169 Yeshiva University	476	92	296	285	4	7	88
170 Stevens Institute of Technology	475	43	165	151	7	7	267
Total, 1st 170 insts.	253,250	57,449	130,697	106,095	18,561	6,041	65,104
171 Calif Sch of Prof Psych - Los Angeles	471	0	292	292	0	0	179
172 Long Island University	470	0	142	129	11	2	328
173 Montana State University	462	115	296	257	37	2	51
174 Michigan Technological University	460	76	228	196	32	0	156
175 Marquette University	459	51	254	222	28	4	154
176 Boston College	456	74	287	263	14	10	95
177 The University of Alabama in Huntsville	454	8	384	253	73	58	62
178 Hahnemann University	454	23	99	92	7	0	332
179 Cleveland State University	454	20	223	219	3	1	211
180 Univ of Texas at El Paso	445	106	193	178	14	1	146
Total, 1st 180 insts.	257,835	57,922	133,095	108,196	18,780	6,119	66,818

See explanatory information, if any, and SOURCE(S) at end of table.

250



**Table F-8. Full-time graduate science and engineering students in doctorate-granting institutions, by source of major support, ranked by full-time graduate science and engineering students: 1991**

Page 4 of 6

Institutional ranking	Total full-time students	Federal Total	Non-Federal				
			Non-Federal total	Institutional 1/	Other U.S. support	Foreign support 2/	Self, loans, & family
181 Colorado School of Mines	444	17	389	257	20	112	38
182 Calif Sch of Prof Psych-Berkeley/Alamed	444	3	0	0	0	0	441
183 Polytechnic University	441	63	182	119	47	16	196
184 Miami University	436	27	344	340	2	2	65
185 University of Puerto Rico	428	56	297	283	6	8	75
186 Brandeis University	425	130	266	254	8	4	29
187 St. Louis University	423	106	167	139	24	4	150
188 Loyola University of Chicago	423	33	223	210	9	4	167
189 New School for Social Research	416	30	166	125	13	28	220
190 South Dakota State University	413	37	285	246	29	10	91
Total, 1st 190 insts.	262,128	58,424	135,414	110,169	18,938	6,307	68,290
191 University of Montana	412	46	194	174	13	7	172
192 University of Southern Mississippi	407	95	206	180	26	0	106
193 Baylor University	405	124	246	232	14	0	35
194 Nova University	399	0	0	0	0	0	399
195 Lamar University	387	62	152	150	2	0	173
196 Florida Atlantic University	381	34	335	295	40	0	12
197 Calif Sch of Prof Psych - San Diego	379	5	55	52	3	0	319
198 Illinois State University	379	21	274	262	12	0	84
199 Worcester Polytechnic Institute	367	39	181	121	49	11	147
200 New York Institute of Technology	364	0	36	28	8	0	328
Total, 1st 200 insts.	266,008	58,850	137,093	111,663	19,105	6,325	70,065
201 St John's University	364	5	131	124	7	0	228
202 Dartmouth College	358	162	190	180	30	0	6
203 Univ of Texas SW Medical Ctr at Dallas	354	130	163	119	44	0	61
204 Wichita State University	335	15	220	220	0	0	100
205 Florida International University	334	24	135	123	10	2	175
206 Univ of North Carolina at Greensboro	332	73	183	174	9	0	76
207 University of Alaska at Fairbanks	329	73	184	167	17	0	72
208 East Carolina University	318	17	220	216	4	0	81
209 College of William and Mary	316	93	202	189	9	4	21
210 Calif Sch of Prof Psych - Fresno	315	164	2	1	1	0	149
Total, 1st 210 insts.	269,363	59,606	138,723	113,156	19,236	6,331	71,034
211 Rush University	312	51	89	72	16	1	172
212 Univ of Texas Hlth Sci Ctr San Antonio	311	163	111	101	7	3	37
213 Baylor College of Medicine	303	160	121	64	56	1	22
214 Idaho State University	303	74	110	88	21	1	119
215 CUNY City College	302	16	55	55	0	0	231
216 Hofstra University	300	23	66	62	3	1	211
217 Fordham University	292	9	126	120	3	3	157
218 University of South Alabama	287	29	89	86	3	0	169
219 University of Missouri - Kansas City	286	50	128	112	16	0	108
220 Central Michigan University	285	0	159	156	3	0	126
Total, 1st 220 insts.	272,344	60,181	139,777	114,072	19,364	6,341	72,386
221 Caribbean Center for Advanced Studies	282	0	25	25	0	0	257
222 Clarkson University	279	62	181	143	38	0	36
223 Univ of Med and Dent of New Jersey	275	42	210	175	32	3	23
224 Loma Linda University	271	10	84	78	4	2	177
225 Fairleigh Dickinson University	260	4	25	25	0	0	231
226 Fuller Theological Seminary	260	0	2	0	2	0	258
227 Ball State University	259	2	182	176	6	0	75
228 Univ of Texas Med Branch at Galveston	258	91	122	100	19	3	45
229 South Dakota School of Mines and Tech	257	33	122	95	17	10	102
230 Indiana State University	257	6	174	136	22	16	77
Total, 1st 230 insts.	275,002	60,431	140,904	115,025	19,504	6,375	73,667
231 CUNY Hunter College	253	28	108	87	21	0	117
232 New Mexico Institute of Mining and Tech	252	0	211	198	0	13	41
233 University of Northern Colorado	250	14	65	65	0	0	171
234 University of North Dakota	246	16	189	177	12	0	43
235 Villanova University	246	7	142	137	4	1	97
236 Oakland University	245	7	95	83	12	0	143
237 Clark University	243	35	182	151	28	3	26
238 US International University	231	0	9	9	0	0	222
239 Louisiana Tech University	231	13	129	117	12	0	89
240 Catholic University of America	223	41	114	85	12	17	68
Total, 1st 240 insts.	277,424	60,592	142,148	116,134	19,605	6,409	74,684

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-8. Full-time graduate science and engineering students in doctorate-granting institutions, by source of major support, ranked by full-time graduate science and engineering students: 1991**

Page 5 of 6

Institutional ranking	Total full-time students	Federal Total	Non-Federal				
			Non-Federal total	Institutional 1/	Other U.S. support	Foreign support 2/	Self, loans, & family
241 Adelphi University	223	31	192	192	0	0	0
242 SUNY - Coll of Env Science and Forestry	222	40	128	94	33	1	54
243 Duquesne University	218	0	82	82	0	0	136
244 Tennessee Technological University	214	0	197	197	0	0	17
245 Wake Forest University	212	19	192	189	0	3	1
246 University of Dayton	203	17	146	144	1	1	40
247 Clark Atlanta University	200	55	102	66	35	1	43
248 The Wright Institute	199	0	13	9	2	2	186
249 University of Tulsa	197	1	95	90	5	0	101
250 Thomas Jefferson University	196	42	105	103	2	0	49
Total, 1st 250 insts.	279,508	60,797	143,400	117,300	19,683	6,417	75,311
251 University of Missouri - St Louis	195	8	115	106	9	0	72
252 Sam Houston State University	194	1	101	86	7	8	92
253 Santa Clara University	192	6	30	21	9	0	156
254 University of Detroit	189	2	39	30	6	3	148
255 Claremont Univ Center & Graduate School	185	0	81	28	14	39	104
256 Andrews University	183	0	24	24	0	0	159
257 University of South Dakota	181	16	124	110	14	0	41
258 East Tennessee State University	177	8	113	107	5	1	56
259 Southern Methodist University	171	24	91	77	1	13	56
260 CUNY Mt. Sinai Sch of Medicine	164	74	90	69	20	1	0
Total, 1st 260 insts.	281,339	60,936	144,208	117,958	19,768	6,482	76,195
261 Biola University	163	1	46	45	0	1	116
262 Medical University of South Carolina	160	24	127	110	15	2	9
263 California Institute of Integral Studie	159	0	18	18	0	0	141
264 Northeast Louisiana University	156	0	143	143	0	0	13
265 University of Tennessee, Memphis	155	71	70	61	8	1	14
266 Oregon Grad Inst of Science & Technolog	152	57	83	59	16	8	12
267 Marshall University	149	7	89	88	1	0	53
268 East Texas State University	147	3	46	40	6	0	98
269 Medical College of Ohio at Toledo	138	8	120	119	1	0	10
270 Pacific Grad School of Prof Psych	136	0	24	24	0	0	112
Total, 1st 270 insts.	282,854	61,107	144,974	118,665	19,815	6,494	76,773
271 University of the Pacific	136	10	59	57	2	0	67
272 Forest Institute of Prof Psych	136	0	0	0	0	0	136
273 University of Health Sciences (Chicago)	129	3	89	88	1	0	37
274 Rockefeller University	128	47	81	77	3	1	0
275 Stephen F. Austin State University	126	9	88	58	10	0	49
276 Wesleyan University	123	25	96	92	4	0	2
277 Texas Christian University	119	10	92	90	2	0	17
278 Uniformed Serv Univ of the Hlth Science	118	69	33	0	22	11	16
279 Oregon Health Sciences University	117	69	48	25	23	0	0
280 Florida A & M University	116	14	52	52	0	0	50
Total, 1st 280 insts.	284,102	61,363	145,592	119,204	19,882	6,506	77,147
281 University of Nebraska Medical Center	115	28	83	78	4	1	4
282 SUNY - Health Sci Ctr at Brooklyn	114	16	98	95	3	0	0
283 Medical College of Georgia	108	31	54	54	0	0	23
284 Eastern Virginia Medical School	106	8	56	50	6	0	42
285 Pace University	104	0	71	59	12	0	33
286 Alfred University	104	4	95	73	21	1	5
287 Mayo Graduate School	101	3	98	97	1	0	0
288 Indiana University of Pennsylvania	100	7	77	77	0	0	16
289 University of Northern Iowa	99	3	41	39	0	2	55
290 University of Arkansas - Med Sci Campus	94	10	67	65	2	0	17
Total, 1st 290 insts.	285,147	61,473	146,332	119,891	19,931	6,510	77,342
291 Seton Hall University	94	17	31	30	1	0	46
292 Medical College of Wisconsin	93	28	65	52	12	1	0
293 The Medical College of Pennsylvania	91	24	32	23	9	0	35
294 Texas College of Osteopathic Medicine	89	34	39	23	16	0	16
295 Xavier University	84	84	0	0	0	0	0
296 Albany Medical College Grad Studies Pro	82	31	42	41	1	0	9
297 Maharishi International University	78	0	67	61	0	6	11
298 Univ. of Osteopathic Med & Health Sci	74	0	0	0	0	0	74
299 Chicago School of Prof Psych	73	0	23	23	0	0	50
300 SUNY - Health Sci Ctr at Syracuse	72	16	54	51	3	0	2
Total, 1st 300 insts.	285,977	61,707	146,685	120,195	19,973	6,517	77,585

See explanatory information, if any, and SOURCE(S) at end of table.

270

**Table F-8. Full-time graduate science and engineering students in doctorate-granting institutions, by source of major support, ranked by full-time graduate science and engineering students: 1991**

Page 6 of 6

Institutional ranking	Total full-time students	Federal Total	Non-Federal				
			Non-Federal total	Institutional 1/	Other U.S. support	Foreign support 2/	Self, loans, & family
301 University of Maryland Eastern Shore	71	8	45	43	0	2	18
302 Institute of Paper Science & Technology	70	0	68	64	0	4	2
303 New York Medical College	69	12	41	32	9	0	16
304 Rand Graduate School of Policy Studies	60	0	60	60	0	0	0
305 Meharry Medical College	54	44	10	3	3	4	0
306 Creighton University	48	0	37	37	0	0	11
307 Philadelphia Coll of Pharmacy and Sci	47	0	41	35	3	3	6
308 Catholic University of Puerto Rico	48	12	0	0	0	0	34
309 Emerson College	45	14	23	23	0	0	8
310 Bryn Mawr College	44	2	31	31	0	0	11
Total, 1st 310 insts.	286,531	61,799	147,041	120,523	19,988	6,530	77,691
311 Mass College of Pharmacy/Allied Health	42	1	22	18	0	4	19
312 Baylor College of Dentistry	38	1	0	0	0	0	37
313 Institute of Textile Technology	30	0	30	0	30	0	0
314 University of New England	25	0	0	0	0	0	25
315 Spalding University	25	1	8	7	0	1	16
316 Union College(NY)	19	0	1	1	0	0	18
317 Golden Gate University	15	0	0	0	0	0	15
318 CUNY Herbert H. Lehman College	10	1	8	0	2	6	1
319 SUNY State College of Optometry	10	0	10	10	0	0	0
320 Ponce School of Medicine	7	7	0	0	0	0	0
Total, 1st 320 insts.	286,752	61,810	147,120	120,559	20,020	6,541	77,822
321 Mercer University	3	0	3	3	0	0	0
322 Smith College	1	0	1	1	0	0	0
323 Chicago Coll of Osteo Medicine	0	0	0	0	0	0	0
324 Woods Hole Oceanographic Institution	0	0	0	0	0	0	0
325 Univ of Health Sciences (Kansas City)	0	0	0	0	0	0	0
326 Kirksville College of Osteopathic Med	0	0	0	0	0	0	0
327 Phila College of Osteopathic Medicine	0	0	0	0	0	0	0
328 NE Ohio Univ Med School	0	0	0	0	0	0	0
329 Providence College	0	0	0	0	0	0	0
330 West Virginia Sch of Osteopathic Med	0	0	0	0	0	0	0
Total, 1st 330 insts.	286,756	61,810	147,124	120,563	20,020	6,541	77,822
331 Univ of Texas MD Anderson Cancer Center	0	0	0	0	0	0	0
332 Morehouse School of Medicine	0	0	0	0	0	0	0
333 Charles R. Drew Univ of Medicine & Sci	0	0	0	0	0	0	0
Total, 1st 333 insts.	286,756	61,810	147,124	120,563	20,020	6,541	77,822

1/ Including support from State and local governments

2/ Excluding self-supported foreign students

NOTE: Includes medical schools

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table F-9. Full-time graduate science and engineering students in doctorate-granting institutions receiving Federal support, by agency source of major support, ranked by federally supported full-time graduate science and engineering students: 1991**

Page 1 of 6

Institutional ranking	Federal total	Dept. of Agric.	Dept. of Defense	Dept. of HHS			NSF	Other Federal
				Total	NIH	Other HHS		
Total, all institutions	61,810	3,002	9,083	20,137	15,923	4,214	12,538	17,050
1 University of Calif at Berkeley	1,859	20	140	415	412	3	450	834
2 University of Illinois at Urbana	1,859	197	417	298	214	84	589	358
3 Massachusetts Institute of Technology	1,779	1	569	278	268	10	526	405
4 University of Wisconsin - Madison	1,642	220	81	572	523	49	368	401
5 Stanford University	1,406	1	291	293	290	3	452	369
6 University of Washington	1,293	34	145	510	403	107	306	298
7 University of Minnesota	1,181	122	83	429	342	87	246	301
8 US Naval Postgraduate School	1,179	0	1,179	0	0	0	0	0
9 University of Calif at Los Angeles	1,159	9	150	514	349	165	287	199
10 Cornell University	1,095	83	118	253	169	84	342	299
Total, 1st 10 insts.	14,452	687	3,173	3,562	2,970	592	3,566	3,464
11 University of Michigan	1,092	6	94	429	396	33	244	319
12 Harvard University	1,089	2	92	552	512	40	275	168
13 University of Colorado	991	8	85	373	190	183	167	358
14 Univ of North Carolina at Chapel Hill	916	0	39	557	417	140	105	215
15 Pennsylvania State University	825	50	206	143	94	49	159	267
16 Purdue University	797	69	84	153	131	22	255	236
17 University of Calif at San Diego	771	0	119	334	324	10	211	107
18 Columbia University Main Division	765	0	85	367	326	41	188	125
19 University of Pennsylvania	764	1	92	397	368	9	174	100
20 University of Arizona	758	58	97	203	160	43	128	272
Total, 1st 20 insts.	23,220	881	4,166	7,070	5,908	1,162	5,472	5,631
21 Ohio State University	755	43	82	215	189	26	204	211
22 University of Southern California	724	15	189	258	222	36	151	111
23 Univ of Texas at Austin	706	0	127	160	150	10	171	248
24 North Carolina State Univ at Raleigh	678	66	93	95	74	21	149	275
25 University of Maryland - College Park	658	101	106	58	58	0	184	209
26 Yale University	630	1	39	357	332	25	106	127
27 Air Force Institute of Technology	589	0	589	0	0	0	0	0
28 Texas A & M University	577	45	142	76	64	12	146	168
29 California Institute of Technology	569	0	135	124	81	43	206	104
30 Georgia Institute of Technology	547	0	189	47	46	1	146	165
Total, 1st 30 insts.	29,653	1,152	5,857	8,460	7,124	1,336	6,935	7,249
31 Northwestern University	547	0	63	186	175	11	173	125
32 University of Hawaii at Manoa	543	59	16	91	35	56	83	294
33 Johns Hopkins University	531	1	12	407	329	78	51	60
34 Michigan State University	529	116	17	139	124	15	157	100
35 University of Virginia	528	1	45	186	179	7	86	210
36 Iowa State University of Sci & Tech	521	114	17	57	57	0	72	261
37 Oregon State University	519	98	52	72	69	3	93	204
38 Princeton University	507	0	78	107	104	3	161	161
39 SUNY - Stony Brook	492	0	14	201	171	30	185	92
40 SUNY - Buffalo	490	3	36	245	191	54	123	83
Total, 1st 40 insts.	34,860	1,544	6,207	10,151	8,558	1,593	8,119	8,839
41 University of Pittsburgh	486	1	51	247	177	70	84	103
42 Indiana University	485	4	26	187	146	41	100	168
43 University of Florida	484	55	80	196	145	51	100	53
44 University of Rochester	481	1	42	203	177	26	123	112
45 University of Utah	457	0	69	195	129	66	84	109
46 Virginia Polytechnic Inst and State Uni	449	41	79	22	21	1	93	214
47 Carnegie-Mellon University	442	0	106	55	55	0	201	80
48 Washington University	432	0	13	268	256	12	64	87
49 University of Calif at San Francisco	410	0	0	384	200	184	24	2
50 The University of Alabama at Birmingham	399	0	15	317	191	126	23	44
Total, 1st 50 insts.	39,385	1,646	6,688	12,225	10,055	2,170	9,015	9,811
51 University of Iowa	394	3	36	236	187	49	54	65
52 University of Calif at Davis	392	31	20	154	154	0	66	121
53 Case Western Reserve University	388	0	36	243	235	8	58	51
54 University of Calif at Santa Barbara	383	2	149	26	26	0	119	87
55 Duke University	379	3	29	201	194	7	75	71
56 University of Massachusetts	376	48	40	110	77	33	101	77
57 University of Calif at Irvine	364	0	33	132	111	21	88	111
58 Vanderbilt University	334	0	28	180	156	24	22	104
59 University of Cincinnati	330	0	40	131	108	23	40	119
60 Rensselaer Polytechnic Institute	313	1	77	22	22	0	84	129
Total, 1st 60 insts.	43,038	1,734	7,176	13,660	11,325	2,335	9,722	10,746

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-9. Full-time graduate science and engineering students in doctorate-granting institutions receiving Federal support, by agency source of major support, ranked by federally supported full-time graduate science and engineering students: 1991**

Page 2 of 6

Institutional ranking	Federal total	Dept. of Agric.	Dept. of Defense	Dept. of HHS			NSF	Other Federal
				Total	NIH	Other HHS		
61 University of Georgia	311	78	23	107	99	8	47	56
62 University of Chicago	304	1	5	154	154	0	60	84
63 Rutgers the State University	304	26	39	107	93	14	65	67
64 University of Illinois at Chicago	303	0	30	148	96	52	54	71
65 University of Oklahoma	298	1	8	76	39	37	69	144
66 CUNY Graduate School and Univ Center	297	0	11	147	139	8	54	85
67 Univ of Texas Hlth Sci Ctr at Houston	287	0	0	224	206	18	3	60
68 Louisiana State University System	270	38	6	58	45	13	44	124
69 University of Kentucky	265	56	10	76	42	34	30	93
70 University of South Carolina	265	2	10	109	67	42	59	85
Total, 1st 70 insts.	45,942	1,936	7,318	14,866	12,305	2,561	10,207	11,615
71 University of Tennessee at Knoxville	262	44	11	44	17	27	27	136
72 New York University	259	0	16	164	119	45	38	41
73 Brown University	259	0	56	57	52	5	91	55
74 University of New Mexico	257	0	35	46	24	22	46	130
75 University of Connecticut	254	33	25	55	43	12	48	93
76 Colorado State University	249	18	19	63	0	63	44	105
77 Auburn University	245	46	46	2	2	0	18	133
78 University of Miami	228	0	24	106	95	11	28	70
79 Rice University	227	3	31	40	40	0	70	63
80 West Virginia University	222	70	4	41	27	14	18	89
Total, 1st 80 insts.	48,404	2,150	7,585	15,484	12,724	2,760	10,635	12,550
81 Arizona State University	221	0	42	34	0	34	89	56
82 University of Delaware	221	19	35	12	7	5	71	84
83 University of Missouri - Columbia	214	37	7	69	51	18	29	72
84 Oklahoma State University	211	72	0	0	0	0	0	139
85 Clemson University	207	143	19	4	3	1	23	18
86 University of Nebraska - Lincoln	202	35	18	37	24	13	34	78
87 Utah State University	192	38	9	30	26	4	19	96
88 Boston University	190	0	11	95	60	35	28	56
89 University of Rhode Island	187	15	42	27	16	11	35	68
90 Virginia Commonwealth University	187	1	25	134	81	53	4	23
Total, 1st 90 insts.	50,436	2,510	7,793	15,926	12,992	2,934	10,967	13,240
91 San Diego State University	183	1	2	131	12	119	5	44
92 Florida State University	182	2	37	31	29	2	41	71
93 Tufts University	182	0	5	118	112	6	14	45
94 University of Oregon	179	1	10	63	63	0	47	58
95 Syracuse University	176	0	35	45	43	2	31	65
96 University of South Florida	176	0	14	97	33	64	20	45
97 Washington State University	175	34	17	53	52	1	33	38
98 University of Maryland - Balt Prof Sch	174	0	63	101	43	58	1	9
99 Mississippi State University	171	17	23	8	7	1	29	94
100 Calif Sch of Prof Psych - Fresno	164	0	0	2	0	2	0	162
Total, 1st 100 insts.	52,198	2,565	7,999	16,575	13,386	3,189	11,188	13,871
101 Univ of Texas Hlth Sci Ctr San Antonio	163	0	76	75	48	27	4	8
102 Dartmouth College	162	2	41	62	61	1	28	29
103 Baylor College of Medicine	160	0	5	147	137	10	5	3
104 Wayne State University	151	0	7	87	61	26	27	30
105 Lehigh University	149	0	46	15	14	1	42	46
106 Kansas State University	149	44	4	16	13	3	28	57
107 New Mexico State University	146	4	32	7	7	0	24	79
108 Old Dominion University	143	0	14	7	6	1	15	107
109 University of Notre Dame	137	0	23	24	24	0	57	33
110 University of Nevada at Reno	137	21	0	10	10	0	39	67
Total, 1st 110 insts.	53,695	2,636	8,247	17,025	13,767	3,256	11,457	14,330
111 University of Vermont & St Agric Colleg	133	30	0	75	72	3	11	17
112 Brandeis University	130	0	1	94	89	5	28	7
113 Univ of Texas SW Medical Ctr at Dallas	130	0	0	124	123	1	0	6
114 University of Puerto Rico Med Sci Campu	128	0	0	112	38	74	2	14
115 University of Kansas	127	0	0	69	57	12	17	41
116 Texas Tech University	125	4	42	34	14	20	25	20
117 Temple University	125	0	0	68	49	19	10	47
118 Baylor University	124	0	119	3	3	0	0	2
119 University of Maine	122	28	0	11	10	1	39	44
120 Southern Illinois Univ at Carbondale	121	11	5	22	21	1	4	79
Total, 1st 120 insts.	54,960	2,709	8,414	17,637	14,243	3,394	11,593	14,607

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-9. Full-time graduate science and engineering students in doctorate-granting institutions receiving Federal support, by agency source of major support, ranked by federally supported full-time graduate science and engineering students: 1991**

Page 3 of 6

Institutional ranking	Federal total	Dept. of Agric.	Dept. of Defense	Dept. of HHS			NSF	Other Federal
				Total	NIH	Other HHS		
121 University of Idaho	118	21	3	8	7	1	16	70
122 University of Wyoming	116	13	3	14	9	5	29	57
123 SUNY - Albany	116	0	0	41	29	12	15	60
124 University of New Hampshire	115	31	7	12	5	7	26	39
125 Montana State University	115	17	2	18	11	7	50	28
126 University of Mississippi	111	3	24	35	17	18	11	38
127 Univ of Texas at El Paso	106	0	6	8	8	0	37	55
128 St. Louis University	106	0	13	60	45	15	2	31
129 George Washington University	105	0	23	14	14	0	3	65
130 University of Calif at Santa Cruz	105	0	2	26	26	0	44	33
Total, 1st 130 insts.	56,073	2,794	8,497	17,873	14,414	3,459	11,826	15,083
131 Emory University	104	1	7	87	70	17	0	9
132 University of Wisconsin - Milwaukee	100	0	4	27	5	22	19	50
133 Univ of Texas at Arlington	98	0	22	38	3	35	14	24
134 Kent State University	97	0	12	31	11	20	25	29
135 University of Southern Mississippi	95	3	15	7	2	5	16	54
136 Tulane University of Louisiana	95	0	12	6	6	0	2	75
137 University of Akron	95	0	4	18	5	13	27	46
138 Drexel University	95	3	16	19	19	0	29	28
139 College of William and Mary	93	0	8	0	0	0	17	68
140 University of Calif at Riverside	92	9	2	32	32	0	23	26
Total, 1st 140 insts.	57,037	2,810	8,599	18,138	14,567	3,571	11,998	15,492
141 Yeshiva University	92	0	0	91	84	7	0	1
142 Univ of Texas Med Branch at Galveston	91	0	2	88	68	20	0	1
143 Georgetown University	90	2	16	32	20	12	10	30
144 University of Puerto Rico - Rio Piedras	90	6	1	38	34	4	2	43
145 University of Missouri - Rolla	88	0	15	4	4	0	23	46
146 Howard University	88	0	9	32	26	6	14	33
147 Georgia State University	87	0	2	71	30	41	12	2
148 University of North Texas	86	0	8	20	19	1	8	50
149 Xavier University	84	0	0	84	82	2	0	0
150 Michigan Technological University	76	9	4	2	2	0	20	41
Total, 1st 150 insts.	57,909	2,827	8,656	18,600	14,936	3,664	12,087	15,739
151 University of Arkansas	76	13	4	7	7	0	16	36
152 Northern Illinois University	75	3	2	13	13	0	5	52
153 University of Maryland - Baltimore Cnty	75	1	4	31	28	3	14	25
154 Boston College	74	0	7	55	23	32	1	11
155 Idaho State University	74	0	0	19	0	19	0	55
156 CUNY Mt. Sinai Sch of Medicine	74	0	0	71	55	6	0	3
157 Illinois Institute of Technology	73	0	19	2	2	0	16	36
158 Univ of North Carolina at Greensboro	73	2	0	65	0	65	0	6
159 University of Alaska at Fairbanks	73	0	1	1	1	0	22	49
160 The American University	72	1	9	11	10	1	6	45
Total, 1st 160 insts.	58,648	2,847	8,702	18,875	15,085	3,790	12,167	16,057
161 North Dakota State University	71	40	12	0	0	0	12	7
162 University of Tennessee, Memphis	71	0	0	69	43	26	2	0
163 The University of Alabama	70	0	3	18	13	5	16	33
164 Oregon Health Sciences University	69	0	2	52	43	9	2	13
165 Uniformed Serv Univ of the Hlth Science	69	0	63	2	2	0	0	4
166 Polytechnic University	63	0	25	0	0	0	27	11
167 Wright State University	63	0	12	15	7	8	8	28
168 Clarkson University	62	0	20	0	0	0	7	35
169 Lamar University	62	0	0	0	0	0	0	62
170 University of Denver	61	0	8	23	10	13	8	22
Total, 1st 170 insts.	59,309	2,887	8,847	19,054	15,203	3,851	12,249	16,272
171 Memphis State University	60	8	4	24	24	0	6	18
172 Oregon Grad Inst of Science & Technolog	57	2	0	4	4	0	11	40
173 Northeastern University	56	0	2	20	15	5	25	9
174 University of Houston-University Park	56	0	13	16	9	7	9	18
175 University of Puerto Rico	56	15	7	12	12	0	11	11
176 Clark Atlanta University	55	0	3	29	29	0	10	13
177 University of Massachusetts Lowell	53	2	7	34	2	32	3	7
178 Marquette University	51	0	0	14	9	5	10	27
179 Rush University	51	0	0	51	18	33	0	0
180 University of Missouri - Kansas City	50	0	6	36	24	12	1	7
Total, 1st 180 insts.	59,854	2,914	8,889	19,294	15,349	3,945	12,335	16,422

See explanatory information, if any, and SOURCE(S) at end of table.



**Table F-9. Full-time graduate science and engineering students in doctorate-granting institutions receiving Federal support, by agency source of major support, ranked by federally supported full-time graduate science and engineering students: 1991**

Page 4 of 6

Institutional ranking	Federal total	Dept. of Agric.	Dept. of Defense	Dept. of HHS			NSF	Other Federal
				Total	NIH	Other HHS		
181 SUNY - Binghamton	48	0	1	20	6	14	10	17
182 Texas Woman's University	47	0	0	44	7	37	0	3
183 Rockefeller University	47	0	0	43	43	0	4	0
184 University of Montana	46	24	0	8	8	0	5	9
185 Union Institute	46	0	2	30	24	6	3	11
186 Northern Arizona University	45	13	0	3	1	2	4	25
187 Meharry Medical College	44	0	0	38	37	1	2	4
188 Stevens Institute of Technology	43	0	19	4	4	0	8	12
189 Thomas Jefferson University	42	0	0	40	40	0	1	1
190 Univ of Med and Dent of New Jersey	42	1	0	38	38	0	3	0
Total, 1st 190 insts.	60,304	2,952	8,911	19,562	15,557	4,005	12,375	16,504
191 Catholic University of America	41	0	11	16	6	10	2	12
192 Columbia University Teachers College	40	0	2	34	19	15	3	1
193 SUNY - Coll of Env Science and Forestry	40	17	0	0	0	0	2	21
194 Worcester Polytechnic Institute	39	0	7	12	12	0	10	10
195 South Dakota State University	37	15	4	10	1	9	3	5
196 Clark University	35	0	3	9	9	0	11	12
197 Texas College of Osteopathic Medicine	34	0	0	27	27	0	2	5
198 Florida Atlantic University	34	0	13	2	2	0	8	11
199 Loyola University of Chicago	33	0	0	24	14	10	5	4
200 South Dakota School of Mines and Tech	33	0	0	0	0	0	16	17
Total, 1st 200 insts.	60,670	2,984	8,951	19,696	15,647	4,049	12,437	16,602
201 Medical College of Georgia	31	0	0	26	3	23	0	5
202 Adelphi University	31	0	0	0	0	0	0	31
203 Albany Medical College Grad Studies Pro	31	0	3	28	21	7	0	0
204 New School for Social Research	30	0	0	0	0	0	0	30
205 University of South Alabama	29	0	1	10	0	10	8	10
206 CUNY Hunter College	28	0	0	18	11	7	4	6
207 University of Nebraska Medical Center	28	3	4	14	14	0	0	7
208 Medical College of Wisconsin	28	1	0	24	24	0	1	2
209 Miami University	27	2	1	5	2	3	0	19
210 Florida Institute of Technology	25	0	4	4	3	1	3	14
Total, 1st 210 insts.	60,958	2,990	8,964	19,825	15,725	4,100	12,453	16,726
211 Wesleyan University	25	1	1	16	16	0	7	0
212 Southern Methodist University	24	0	17	1	1	0	3	3
213 Florida International University	24	0	0	2	2	0	6	16
214 Portland State University	24	0	21	0	0	0	1	2
215 The Medical College of Pennsylvania	24	0	1	22	15	7	0	1
216 Medical University of South Carolina	24	0	1	21	21	0	0	2
217 Hofstra University	23	0	0	0	0	0	0	23
218 George Mason University	23	0	8	5	3	2	5	5
219 Hahnemann University	23	0	0	3	3	0	0	20
220 New Jersey Institute of Technology	22	0	8	1	1	0	4	9
Total, 1st 220 insts.	61,194	2,991	9,021	19,896	15,787	4,109	12,479	16,807
221 Illinois State University	21	0	0	5	5	0	14	2
222 Cleveland State University	20	0	0	0	0	0	0	20
223 University of Louisville	20	0	2	14	14	0	4	0
224 Wake Forest University	19	0	0	19	17	2	0	0
225 East Carolina University	17	0	0	0	0	0	0	17
226 University of Dayton	17	0	9	0	0	0	3	5
227 University of Toledo	17	0	3	1	1	0	1	12
228 Seton Hall University	17	0	0	17	0	17	0	0
229 University of Central Florida	17	0	9	0	0	0	2	6
230 Colorado School of Mines	17	0	13	0	0	0	0	4
Total, 1st 230 insts.	61,376	2,991	9,057	19,952	15,824	4,128	12,503	16,873
231 SUNY - Health Sci Ctr at Syracuse	16	0	0	15	15	0	0	1
232 SUNY - Health Sci Ctr at Brooklyn	16	0	0	14	14	0	1	1
233 Bowling Green State University	16	0	6	1	1	0	2	7
234 University of North Dakota	16	2	1	2	2	0	3	8
235 University of South Dakota	16	0	5	2	2	0	3	6
236 CUNY City College	16	0	0	12	12	0	4	0
237 Western Michigan University	15	0	1	4	4	0	0	10
238 Wichita State University	15	0	0	10	0	10	0	5
239 University of Northern Colorado	14	0	0	14	0	14	0	0
240 Emerson College	14	0	0	14	0	14	0	0
Total, 1st 240 insts.	61,530	2,993	9,070	20,040	15,874	4,166	12,516	16,911

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-9. Full-time graduate science and engineering students in doctorate-granting institutions receiving Federal support, by agency source of major support, ranked by federally supported full-time graduate science and engineering students: 1991**

Page 5 of 6

Institutional ranking	Federal total	Dept. of Agric.	Dept. of Defense	Dept. of HHS			NSF	Other Federal
				Total	NIH	Other HHS		
241 Florida A & M University	14	0	0	0	0	0	0	14
242 Louisiana Tech University	13	1	0	0	0	0	0	12
243 Catholic University of Puerto Rico	12	0	0	12	0	12	0	0
244 University of Southwestern Louisiana	12	0	5	0	0	0	1	6
245 New York Medical College	12	0	0	6	6	0	0	6
246 Loma Linda University	10	0	0	9	2	7	0	1
247 University of the Pacific	10	0	0	0	0	0	0	10
248 University of Arkansas - Med Sci Campus	10	0	0	10	0	10	0	0
249 Texas Christian University	10	0	0	10	2	8	0	0
250 Ohio University	9	0	0	2	2	0	0	7
Total, 1st 250 Insts.	61,642	2,994	9,075	20,089	15,886	4,203	12,517	16,967
251 Stephen F. Austin State University	9	6	0	0	0	0	0	3
252 Fordham University	9	0	0	6	6	0	0	3
253 Eastern Virginia Medical School	8	0	0	6	6	0	0	2
254 University of Maryland Eastern Shore	8	2	1	1	0	1	1	3
255 University of Missouri - St Louis	8	0	1	2	0	2	2	3
256 Medical College of Ohio at Toledo	8	0	0	0	0	0	0	8
257 East Tennessee State University	8	0	0	0	0	0	0	8
258 The University of Alabama in Huntsville	8	0	0	0	0	0	0	8
259 Villanova University	7	0	0	3	3	0	2	2
260 Marshall University	7	0	0	0	0	0	7	0
Total, 1st 260 Insts.	61,722	3,002	9,077	20,107	15,901	4,206	12,529	17,007
261 Ponce School of Medicine	7	0	0	7	7	0	0	0
262 Oakland University	7	0	0	0	0	0	0	7
263 Indiana University of Pennsylvania	7	0	0	1	0	1	0	6
264 Indiana State University	6	0	0	6	4	2	0	0
265 Santa Clara University	6	0	0	0	0	0	4	2
266 St John's University	5	0	0	5	2	3	0	0
267 Univ of Texas at Dallas	5	0	0	0	0	0	0	5
268 Calif Sch of Prof Psych - San Diego	5	0	1	0	0	0	0	4
269 Fairleigh Dickinson University	4	0	0	0	0	0	0	4
270 Alfred University	4	0	1	0	0	0	2	1
Total, 1st 270 Insts.	61,778	3,002	9,079	20,126	15,914	4,212	12,535	17,036
271 Mayo Graduate School	3	0	0	3	3	0	0	0
272 Calif Sch of Prof Psych-Berkeley/Alameda	3	0	0	0	0	0	0	3
273 University of Health Sciences (Chicago)	3	0	0	0	0	0	0	3
274 De Paul University	3	0	0	3	3	0	0	0
275 East Texas State University	3	0	3	0	0	0	0	0
276 University of Northern Iowa	3	0	0	0	0	0	0	3
277 Ball State University	2	0	0	0	0	0	0	2
278 University of Detroit	2	0	0	2	1	1	0	0
279 Bryn Mawr College	2	0	0	0	0	0	0	2
280 Biola University	1	0	0	0	0	0	0	1
Total, 1st 280 Insts.	61,803	3,002	9,082	20,134	15,921	4,213	12,535	17,050
281 Mass College of Pharmacy/Allied Health	1	0	0	1	1	0	0	0
282 CUNY Herbert H. Lehman College	1	0	0	1	1	0	0	0
283 Baylor College of Dentistry	1	0	1	0	0	0	0	0
284 Sam Houston State University	1	0	0	0	0	0	1	0
285 Spalding University	1	0	0	1	0	1	0	0
286 University of Tulsa	1	0	0	0	0	0	1	0
287 Brigham Young University	1	0	0	0	0	0	1	0
288 The Wright Institute	0	0	0	0	0	0	0	0
289 Antioch University	0	0	0	0	0	0	0	0
290 Pace University	0	0	0	0	0	0	0	0
Total, 1st 290 Insts.	61,810	3,002	9,083	20,137	15,923	4,214	12,538	17,050
291 SUNY State College of Optometry	0	0	0	0	0	0	0	0
292 Calif Sch of Prof Psych - Los Angeles	0	0	0	0	0	0	0	0
293 New York Institute of Technology	0	0	0	0	0	0	0	0
294 Long Island University	0	0	0	0	0	0	0	0
295 Rand Graduate School of Policy Studies	0	0	0	0	0	0	0	0
296 Mercer University	0	0	0	0	0	0	0	0
297 Maharishi International University	0	0	0	0	0	0	0	0
298 Institute of Paper Science & Technology	0	0	0	0	0	0	0	0
299 Institute of Textile Technology	0	0	0	0	0	0	0	0
300 Univ of Texas MD Anderson Cancer Center	0	0	0	0	0	0	0	0
Total, 1st 300 Insts.	61,810	3,002	9,083	20,137	15,923	4,214	12,538	17,050

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-9. Full-time graduate science and engineering students in doctorate-granting institutions receiving Federal support, by agency source of major support, ranked by federally supported full-time graduate science and engineering students: 1991**

Page 6 of 6

Institutional ranking	Federal total	Dept. of Agric.	Dept. of Defense	Dept. of HHS			NSF	Other Federal
				Total	NIH	Other HHS		
301 California Institute of Integral Studie	0	0	0	0	0	0	0	0
302 West Virginia Sch of Osteopathic Med	0	0	0	0	0	0	0	0
303 Tennessee Technological University	0	0	0	0	0	0	0	0
304 Providence College	0	0	0	0	0	0	0	0
305 NE Ohio Univ Med School	0	0	0	0	0	0	0	0
306 Caribbean Center for Advanced Studies	0	0	0	0	0	0	0	0
307 The Fielding Institute	0	0	0	0	0	0	0	0
308 Philadelphia Coll of Pharmacy and Sci	0	0	0	0	0	0	0	0
309 Phila College of Osteopathic Medicine	0	0	0	0	0	0	0	0
310 Pacific Grad School of Prof Psych	0	0	0	0	0	0	0	0
Total, 1st 310 insts.	61,810	3,002	9,083	20,137	15,923	4,214	12,538	17,050
311 Chicago School of Prof Psych	0	0	0	0	0	0	0	0
312 Forest Institute of Prof Psych	0	0	0	0	0	0	0	0
313 Duquesne University	0	0	0	0	0	0	0	0
314 Morehouse School of Medicine	0	0	0	0	0	0	0	0
315 Union College(NY)	0	0	0	0	0	0	0	0
316 New Mexico Institute of Mining and Tech	0	0	0	0	0	0	0	0
317 Creighton University	0	0	0	0	0	0	0	0
318 Kirksville College of Osteopathic Med	0	0	0	0	0	0	0	0
319 Univ of Health Sciences (Kansas City)	0	0	0	0	0	0	0	0
320 Central Michigan University	0	0	0	0	0	0	0	0
Total, 1st 320 insts.	61,810	3,002	9,083	20,137	15,923	4,214	12,538	17,050
321 Andrews University	0	0	0	0	0	0	0	0
322 Woods Hole Oceanographic Institution	0	0	0	0	0	0	0	0
323 Smith College	0	0	0	0	0	0	0	0
324 University of New England	0	0	0	0	0	0	0	0
325 Northeast Louisiana University	0	0	0	0	0	0	0	0
326 Univ. of Osteopathic Med & Health Sci	0	0	0	0	0	0	0	0
327 Chicago Coll of Osteo Medicine	0	0	0	0	0	0	0	0
328 Nova University	0	0	0	0	0	0	0	0
329 Golden Gate University	0	0	0	0	0	0	0	0
330 Fuller Theological Seminary	0	0	0	0	0	0	0	0
Total, 1st 330 insts.	61,810	3,002	9,083	20,137	15,923	4,214	12,538	17,050
331 Claremont Univ Center & Graduate School	0	0	0	0	0	0	0	0
332 US International University	0	0	0	0	0	0	0	0
333 Charles R. Drew Univ of Medicine & Sci	0	0	0	0	0	0	0	0
Total, 1st 333 insts.	61,810	3,002	9,083	20,137	15,923	4,214	12,538	17,050

NOTE: Includes medical schools

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table F-10. Full-time graduate science and engineering students in doctorate-granting institutions, by type of major support, ranked by full-time graduate science and engineering students: 1991**

Page 1 of 6

Institutional ranking	Total full-time students	Fellowships	Traineeships	Research assistantships	Teaching assistantships	Other
Total, all institutions	286,756	26,530	14,883	82,719	62,881	99,743
1 University of Wisconsin - Madison	5,161	481	258	2,006	897	1,519
2 University of Calif at Berkeley	4,979	742	342	1,700	840	1,355
3 University of Illinois at Urbana	4,935	7	364	2,318	1,237	1,009
4 University of Minnesota	4,808	409	141	1,974	1,165	1,119
5 Ohio State University	4,688	348	41	1,481	1,602	1,216
6 University of Michigan	4,545	921	284	1,248	908	1,184
7 Texas A & M University	4,261	331	85	1,493	888	1,464
8 Univ of Texas at Austin	4,210	376	100	1,237	1,047	1,450
9 Massachusetts Institute of Technology	4,187	979	154	1,933	451	670
10 University of Calif at Los Angeles	4,170	481	352	1,050	744	1,543
Total, 1st 10 insts.	45,944	5,075	2,121	16,440	9,779	12,529
11 Stanford University	4,106	1,061	176	1,573	374	922
12 Purdue University	3,706	370	53	1,283	1,140	860
13 University of Southern California	3,582	229	252	766	631	1,704
14 University of Washington	3,553	359	290	1,326	709	889
15 Cornell University	3,453	598	572	1,108	679	496
16 University of Colorado	3,372	216	248	859	565	1,484
17 Harvard University	3,334	1,279	540	530	172	813
18 Pennsylvania State University	3,178	144	43	1,375	822	794
19 University of Arizona	2,864	289	53	928	692	902
20 Indiana University	2,825	326	62	516	800	1,121
Total, 1st 20 insts.	79,917	9,946	4,410	26,704	16,363	22,494
21 Univ of North Carolina at Chapel Hill	2,691	170	292	963	605	661
22 Michigan State University	2,610	124	67	1,153	709	557
23 Georgia Institute of Technology	2,579	175	3	1,249	348	804
24 Virginia Polytechnic Inst and State Uni	2,539	146	16	879	798	700
25 North Carolina State Univ at Raleigh	2,509	216	31	1,081	635	546
26 University of Calif at Davis	2,446	159	49	793	648	797
27 University of Florida	2,413	79	36	1,554	475	269
28 University of Maryland - College Park	2,386	235	0	771	733	649
29 Iowa State University of Sci & Tech	2,332	70	0	1,344	543	375
30 SUNY - Buffalo	2,317	125	111	595	565	921
Total, 1st 30 insts.	104,741	11,445	5,015	37,086	22,422	28,773
31 University of Pittsburgh	2,304	162	83	626	559	674
32 University of Pennsylvania	2,302	534	216	538	315	699
33 Rutgers the State University	2,283	342	51	588	729	573
34 Louisiana State University System	2,272	194	16	858	575	629
35 Columbia University Main Division	2,261	254	225	788	288	708
36 University of Illinois at Chicago	2,026	118	21	612	601	674
37 University of Iowa	1,915	102	123	599	578	513
38 Northwestern University	1,903	505	46	524	279	549
39 Arizona State University	1,895	3	0	552	365	975
40 University of Cincinnati	1,884	71	129	622	437	625
Total, 1st 40 insts.	125,786	13,730	5,925	43,391	27,148	35,592
41 University of Chicago	1,830	404	140	315	242	729
42 Boston University	1,809	99	89	186	489	946
43 University of Virginia	1,780	272	100	565	451	392
44 University of Connecticut	1,776	117	12	534	511	602
45 University of Hawaii at Manoa	1,767	181	77	458	294	757
46 Yale University	1,758	702	193	356	105	402
47 University of Calif at San Diego	1,743	246	205	641	393	258
48 Oregon State University	1,737	55	48	790	384	460
49 SUNY - Stony Brook	1,651	116	18	579	649	289
50 Johns Hopkins University	1,627	234	335	256	222	580
Total, 1st 50 insts.	143,264	16,156	7,142	48,071	30,888	41,007
51 University of Tennessee at Knoxville	1,623	39	18	462	400	704
52 CUNY Graduate School and Univ Center	1,599	127	6	462	332	672
53 University of Oklahoma	1,569	64	91	425	466	523
54 University of Kentucky	1,567	173	91	488	466	349
55 New York University	1,557	260	130	248	333	586
56 University of Utah	1,550	134	70	565	338	443
57 Wayne State University	1,549	76	36	253	371	813
58 George Washington University	1,547	225	5	114	66	1,137
59 University of Calif at Santa Barbara	1,515	174	28	421	528	364
60 University of Massachusetts	1,500	98	71	525	552	254
Total, 1st 60 insts.	158,840	17,526	7,688	52,034	34,740	46,852

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-10. Full-time graduate science and engineering students in doctorate-granting institutions, by type of major support, ranked by full-time graduate science and engineering students: 1991**

Page 2 of 6

Institutional ranking	Total full-time students	Fellowships	Traineeships	Research assistantships	Teaching assistantships	Other
61 University of Georgia	1,486	56	42	669	417	302
62 Colorado State University	1,456	13	49	414	383	597
63 Rensselaer Polytechnic Institute	1,434	116	52	515	372	379
64 Clemson University	1,394	34	1	491	540	328
65 Princeton University	1,374	223	465	420	204	62
66 University of Nebraska - Lincoln	1,367	55	3	536	321	452
67 US Naval Postgraduate School	1,340	0	0	0	0	1,340
68 Duke University	1,329	375	132	235	319	268
69 University of Missouri - Columbia	1,316	99	26	553	288	350
70 Kansas State University	1,309	32	4	558	320	395
Total, 1st 70 insts.	172,645	18,529	8,462	56,425	37,904	51,325
71 University of Houston-University Park	1,293	88	0	94	75	1,036
72 University of Rochester	1,270	223	120	469	200	238
73 Southern Illinois Univ at Carbondale	1,267	98	63	309	394	403
74 Northeastern University	1,268	84	25	203	299	655
75 Carnegie-Mellon University	1,260	187	105	545	206	217
76 University of Calif at Irvine	1,260	217	64	382	364	233
77 University of South Carolina	1,232	32	102	392	418	288
78 University of New Mexico	1,216	90	42	301	284	499
79 Temple University	1,214	87	42	164	333	588
80 Antioch University	1,203	0	0	0	0	1,203
Total, 1st 80 insts.	185,126	19,635	9,025	59,304	40,477	56,685
81 Syracuse University	1,200	123	16	223	398	440
82 Washington State University	1,181	35	47	416	470	213
83 Washington University	1,179	88	191	428	182	290
84 Virginia Commonwealth University	1,168	102	83	114	211	658
85 University of South Florida	1,156	52	84	313	269	438
86 Case Western Reserve University	1,131	62	73	485	123	388
87 California Institute of Technology	1,125	356	0	522	221	26
88 West Virginia University	1,106	27	5	358	268	448
89 Utah State University	1,105	43	32	484	126	420
90 Florida State University	1,093	84	36	318	322	333
Total, 1st 90 insts.	196,570	20,607	9,592	62,965	43,067	60,339
91 Texas Tech University	1,084	11	12	340	293	428
92 San Diego State University	1,083	20	113	117	160	673
93 The University of Alabama at Birmingham	1,078	117	294	250	41	376
94 University of Delaware	1,075	136	16	399	300	224
95 University of Kansas	1,061	4	17	209	271	560
96 University of Wisconsin - Milwaukee	1,018	24	117	103	341	433
97 University of Calif at San Francisco	1,010	168	304	101	19	418
98 Tulane University of Louisiana	1,003	22	272	57	253	399
99 University of Miami	996	113	41	346	155	341
100 Auburn University	994	63	5	343	295	288
Total, 1st 100 insts.	206,972	21,285	10,783	65,230	45,195	84,479
101 University of Akron	984	79	31	401	297	176
102 Mississippi State University	969	11	1	434	155	368
103 Vanderbilt University	953	127	149	289	249	139
104 Univ of Texas at Arlington	950	15	34	191	269	441
105 The American University	939	105	0	120	130	584
106 University of Massachusetts Lowell	915	0	23	86	450	356
107 Ohio University	895	48	106	110	352	279
108 SUNY - Albany	891	98	0	162	323	308
109 University of Rhode Island	883	33	45	238	233	334
110 Tufts University	846	46	38	193	176	393
Total, 1st 110 insts.	216,197	21,847	11,210	67,454	47,829	67,857
111 Columbia University Teachers College	828	22	94	60	76	576
112 University of Puerto Rico - Rio Piedras	824	32	16	79	100	597
113 Northern Illinois University	808	29	104	145	306	224
114 University of Wyoming	791	10	18	242	287	234
115 University of Notre Dame	785	163	6	236	262	118
116 University of Oregon	783	61	29	154	280	259
117 Rice University	779	67	250	321	11	130
118 The University of Alabama	762	29	5	184	305	239
119 University of Arkansas	745	8	0	319	236	182
120 Oklahoma State University	734	0	0	330	327	77
Total, 1st 120 insts.	224,036	22,268	11,732	69,524	50,019	70,493

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-10. Full-time graduate science and engineering students in doctorate-granting institutions, by type of major support, ranked by full-time graduate science and engineering students: 1991**

Page 3 of 6

Institutional ranking	Total full-time students	Fellowships	Traineeships	Research assistantships	Teaching assistantships	Other
121 Western Michigan University	734	19	6	103	173	433
122 Brown University	728	137	28	221	213	129
123 University of Calif at Riverside	722	10	68	210	243	191
124 Lehigh University	721	72	49	254	181	165
125 University of Nevada at Reno	718	19	6	238	121	334
126 University of North Texas	715	32	6	130	206	341
127 University of Missouri - Rolla	704	57	0	204	190	253
128 New Jersey Institute of Technology	702	4	0	91	58	549
129 Texas Woman's University	702	0	37	28	73	564
130 University of Mississippi	701	53	30	260	148	210
Total, 1st 130 insts.	231,183	22,671	11,962	71,263	51,625	73,662
131 Emory University	696	11	293	60	13	319
132 New Mexico State University	695	44	4	170	275	202
133 SUNY - Binghamton	686	67	13	85	295	226
134 Kent State University	662	12	0	76	356	218
135 Georgia State University	644	12	36	192	61	343
136 University of Calif at Santa Cruz	616	80	0	149	280	107
137 Univ of Texas at Dallas	593	16	0	92	205	280
138 University of Central Florida	592	4	1	116	118	353
139 Air Force Institute of Technology	589	0	0	0	0	589
140 Old Dominion University	589	26	16	248	120	179
Total, 1st 140 insts.	237,545	22,943	12,325	72,451	53,348	76,478
141 De Paul University	589	2	1	6	78	502
142 University of Louisville	583	32	0	107	134	310
143 University of New Hampshire	573	24	4	144	250	151
144 Georgetown University	573	113	115	19	13	313
145 University of Maine	567	31	4	228	154	150
146 University of Maryland - Baltimore Cnty	566	22	0	116	179	249
147 Illinois Institute of Technology	557	32	51	102	170	202
148 Univ of Texas Hlth Sci Ctr at Houston	557	23	76	292	0	166
149 Union Institute	556	43	27	75	117	294
150 Memphis State University	549	21	18	173	145	192
Total, 1st 150 insts.	243,215	23,286	12,621	73,713	54,588	79,007
151 Northern Arizona University	549	7	7	112	105	318
152 University of Idaho	537	5	5	238	153	131
153 University of Denver	530	51	15	61	99	304
154 Florida Institute of Technology	529	17	0	81	109	322
155 Drexel University	523	21	23	177	181	121
156 University of Maryland - Balt Prof Sch	518	27	69	167	20	235
157 University of Puerto Rico Med Sci Campu	516	8	131	58	4	315
158 North Dakota State University	509	21	7	229	118	134
159 Wright State University	500	59	52	77	116	196
160 University of Vermont & St Agric Colleg	496	43	30	155	168	100
Total, 1st 160 insts.	248,422	23,545	12,960	75,068	55,666	81,183
161 Brigham Young University	493	0	19	71	87	316
162 George Mason University	493	0	0	108	41	344
163 Howard University	487	84	20	67	97	219
164 University of Southwestern Louisiana	483	36	6	46	125	270
165 Bowling Green State University	482	31	30	114	241	66
166 University of Toledo	481	20	8	92	268	93
167 Portland State University	480	0	0	88	110	282
168 The Fielding Institute	478	0	0	0	0	478
169 Yeshiva University	476	84	196	6	33	157
170 Stevens Institute of Technology	475	3	0	68	123	281
Total, 1st 170 insts.	253,250	23,803	13,239	75,728	56,791	83,689
171 Calif Sch of Prof Psych - Los Angeles	471	4	0	19	26	422
172 Long Island University	470	3	0	52	39	376
173 Montana State University	462	12	6	189	201	54
174 Michigan Technological University	460	91	0	105	105	159
175 Marquette University	459	39	7	79	142	192
176 Boston College	456	36	43	76	163	138
177 The University of Alabama in Huntsville	454	8	0	147	100	199
178 Hahnemann University	454	15	89	2	14	334
179 Cleveland State University	454	5	0	122	89	238
180 Univ of Texas at El Paso	445	47	5	70	150	173
Total, 1st 180 insts.	257,835	24,063	13,389	76,589	57,820	85,974

See explanatory information, if any, and SOURCE(S) at end of table.

250



**Table F-10. Full-time graduate science and engineering students in doctorate-granting institutions, by type of major support, ranked by full-time graduate science and engineering students: 1991**

Page 4 of 6

Institutional ranking	Total full-time students	Fellowships	Traineeships	Research assistantships	Teaching assistantships	Other
181 Colorado School of Mines	444	55	0	119	84	186
182 Calif Sch of Prof Psych-Berkeley/Alamed	444	2	0	0	0	442
183 Polytechnic University	441	43	0	94	87	217
184 Miami University	436	30	4	100	214	88
185 University of Puerto Rico	428	3	0	146	191	88
186 Brandeis University	425	177	46	103	64	35
187 St. Louis University	423	50	51	56	58	208
188 Loyola University of Chicago	423	58	52	97	31	185
189 New School for Social Research	416	87	0	54	8	267
190 South Dakota State University	413	1	5	145	151	111
Total, 1st 190 insts.	262,128	24,569	13,547	77,503	58,708	87,801
191 University of Montana	412	3	18	71	129	191
192 University of Southern Mississippi	407	12	10	130	138	117
193 Baylor University	405	19	0	53	121	212
194 Nova University	399	0	0	0	0	399
195 Lamar University	387	0	42	34	52	259
196 Florida Atlantic University	381	0	0	112	54	215
197 Calif Sch of Prof Psych - San Diego	379	14	0	0	42	323
198 Illinois State University	379	2	0	63	201	113
199 Worcester Polytechnic Institute	367	14	8	85	105	155
200 St John's University	364	21	0	79	36	228
Total, 1st 200 insts.	266,008	24,654	13,625	78,130	59,586	90,013
201 New York Institute of Technology	364	0	0	1	27	336
202 Dartmouth College	358	129	35	156	14	24
203 Univ of Texas SW Medical Ctr at Dallas	354	23	39	200	19	73
204 Wichita State University	335	39	15	51	109	121
205 Florida International University	334	10	4	66	58	196
206 Univ of North Carolina at Greensboro	332	16	74	132	34	76
207 University of Alaska at Fairbanks	329	15	2	142	90	82
208 East Carolina University	318	41	14	66	108	89
209 College of William and Mary	316	16	12	188	64	36
210 Calif Sch of Prof Psych - Fresno	315	6	0	0	0	309
Total, 1st 210 insts.	269,363	24,949	13,818	79,132	60,109	91,355
211 Rush University	312	5	28	51	4	224
212 Univ of Texas Hlth Sci Ctr San Antonio	311	9	48	26	78	150
213 Idaho State University	303	25	70	9	63	136
214 Baylor College of Medicine	303	22	39	188	32	22
215 CUNY City College	302	10	4	4	43	241
216 Hofstra University	300	46	20	14	2	218
217 Fordham University	292	28	3	46	50	165
218 University of South Alabama	287	30	35	35	10	177
219 University of Missouri - Kansas City	286	27	12	64	71	112
220 Central Michigan University	285	16	0	35	98	136
Total, 1st 220 insts.	272,344	25,167	14,077	79,604	60,560	92,936
221 Caribbean Center for Advanced Studies	282	0	0	4	0	278
222 Clarkson University	279	17	9	138	71	44
223 Univ of Med and Dent of New Jersey	275	128	19	91	6	31
224 Loma Linda University	271	14	27	19	0	211
225 Fairleigh Dickinson University	260	0	0	8	4	248
226 Fuller Theological Seminary	260	2	0	0	0	258
227 Ball State University	259	0	0	153	24	82
228 Univ of Texas Med Branch at Galveston	258	22	25	140	0	68
229 Indiana State University	257	15	3	67	51	121
230 South Dakota School of Mines and Tech	257	16	0	49	74	118
Total, 1st 230 insts.	275,002	25,381	14,163	80,273	60,790	94,395
231 CUNY Hunter College	253	9	9	5	55	175
232 New Mexico Institute of Mining and Tech	252	2	0	120	76	54
233 University of Northern Colorado	250	14	0	40	25	171
234 University of North Dakota	248	5	13	36	148	46
235 Villanova University	246	3	0	23	93	127
236 Oakland University	245	0	0	58	31	156
237 Clark University	243	25	2	58	77	81
238 Louisiana Tech University	231	7	0	77	48	99
239 US International University	231	5	0	4	0	222
240 Adelphi University	223	1	10	0	81	131
Total, 1st 240 insts.	277,424	25,452	14,197	80,694	61,424	95,657

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-10. Full-time graduate science and engineering students in doctorate-granting institutions, by type of major support, ranked by full-time graduate science and engineering students: 1991**

Page 5 of 6

Institutional ranking	Total full-time students	Fellowships	Traineeships	Research assistantships	Teaching assistantships	Other
241 Catholic University of America	223	38	14	17	53	101
242 SUNY - Coll of Env Science and Forestry	222	0	0	90	78	54
243 Duquesne University	218	0	0	26	39	153
244 Tennessee Technological University	214	0	0	159	38	17
245 Wake Forest University	212	19	19	17	93	64
246 University of Dayton	203	6	14	92	41	50
247 Clark Atlanta University	200	31	14	47	35	73
248 The Wright Institute	199	11	0	0	1	187
249 University of Tulsa	197	3	0	20	73	101
250 Thomas Jefferson University	196	100	9	6	18	63
Total, 1st 250 insts.	279,508	25,660	14,267	81,168	61,893	96,520
251 University of Missouri - St Louis	195	8	0	27	82	78
252 Sam Houston State University	194	13	0	19	60	102
253 Santa Clara University	192	0	0	21	15	156
254 University of Detroit	189	0	0	17	11	161
255 Claremont Univ Center & Graduate School	185	28	0	0	0	157
256 Andrews University	183	2	0	11	11	159
257 University of South Dakota	181	10	0	28	76	67
258 East Tennessee State University	177	0	1	100	19	57
259 Southern Methodist University	171	13	3	35	59	61
260 CUNY Mt. Sinai Sch of Medicine	164	2	0	162	0	0
Total, 1st 260 insts.	281,339	25,736	14,271	81,588	62,226	97,518
261 Biola University	163	1	0	0	0	162
262 Medical University of South Carolina	160	85	1	28	1	45
263 California Institute of Integral Studie	159	0	0	0	18	141
264 Northeast Louisiana University	156	0	0	44	23	89
265 University of Tennessee, Memphis	155	17	54	46	20	18
266 Oregon Grad Inst of Science & Technolog	152	0	0	139	1	12
267 Marshall University	149	2	0	32	31	84
268 East Texas State University	147	0	0	39	0	108
269 Medical College of Ohio at Toledo	138	114	8	0	0	16
270 Pacific Grad School of Prof Psych	136	5	0	7	12	112
Total, 1st 270 insts.	282,854	25,960	14,334	81,923	62,332	98,305
271 University of the Pacific	136	2	8	0	42	84
272 Forest Institute of Prof Psych	136	0	0	0	0	136
273 University of Health Sciences (Chicago)	129	53	7	3	1	65
274 Rockefeller University	128	85	43	0	0	0
275 Stephen F. Austin State University	126	0	0	30	47	49
276 Wesleyan University	123	0	0	35	85	3
277 Texas Christian University	119	13	8	2	12	84
278 Uniformed Serv Univ of the Hlth Science	118	1	0	47	1	69
279 Oregon Health Sciences University	117	2	10	104	0	1
280 Flonda A & M University	116	2	0	21	11	82
Total, 1st 280 insts.	284,102	26,118	14,410	82,165	62,531	98,878
281 University of Nebraska Medical Center	115	23	12	51	21	8
282 SUNY - Health Sci Ctr at Brooklyn	114	3	8	6	94	3
283 Medical College of Georgia	108	1	26	54	0	27
284 Eastern Virginia Medical School	106	2	0	57	5	42
285 Alfred University	104	4	0	80	15	5
286 Pace University	104	0	0	0	1	103
287 Mayo Graduate School	101	17	84	0	0	0
288 Indiana University of Pennsylvania	100	5	0	78	1	16
289 University of Northern Iowa	99	8	11	13	9	58
290 Seton Hall University	94	0	17	0	30	47
Total, 1st 290 insts.	285,147	26,181	14,568	82,504	62,707	99,187
291 University of Arkansas - Med Sci Campus	94	0	75	0	0	19
292 Medical College of Wisconsin	93	55	0	25	0	13
293 The Medical College of Pennsylvania	91	1	21	25	9	35
294 Texas College of Osteopathic Medicine	89	6	4	49	7	23
295 Xavier University	84	0	82	0	2	0
296 Albany Medical College Grad Studies Pro	82	1	17	10	42	12
297 Mahanishi International University	78	0	32	28	0	18
298 Univ. of Osteopathic Med & Health Sci	74	0	0	0	0	74
299 Chicago School of Prof Psych	73	23	0	0	0	50
300 SUNY - Health Sci Ctr at Syracuse	72	8	26	24	12	2
Total, 1st 300 insts.	285,977	26,275	14,825	82,665	62,779	99,433

See explanatory information, if any, and SOURCE(S) at end of table.

252

**Table F-10. Full-time graduate science and engineering students in doctorate-granting institutions, by type of major support, ranked by full-time graduate science and engineering students: 1991**

Page 6 of 6

Institutional ranking	Total full-time students	Fellowships	Traineeships	Research assistantships	Teaching assistantships	Other
301 University of Maryland Eastern Shore	71	3	0	18	30	20
302 Institute of Paper Science & Technology	70	64	0	0	0	6
303 New York Medical College	69	53	0	0	0	16
304 Rand Graduate School of Policy Studies	60	60	0	0	0	0
305 Meharry Medical College	54	25	27	2	0	0
306 Creighton University	48	19	4	12	0	13
307 Philadelphia Coll of Pharmacy and Sci	47	7	0	0	34	6
308 Catholic University of Puerto Rico	46	0	12	0	0	34
309 Emerson College	45	0	14	0	8	23
310 Bryn Mawr College	44	20	0	0	10	14
Total, 1st 310 insts	286,531	26,526	14,882	82,697	62,861	99,565
311 Mass College of Pharmacy/Allied Health	42	4	0	3	16	19
312 Baylor College of Dentistry	38	0	0	0	0	38
313 Institute of Textile Technology	30	0	0	0	0	30
314 University of New England	25	0	0	0	0	25
315 Spalding University	25	0	1	5	0	19
316 Union College(NY)	19	0	0	1	0	18
317 Golden Gate University	15	0	0	0	0	15
318 CUNY Herbert H. Lehman College	10	0	0	1	0	9
319 SUNY State College of Optometry	10	0	0	5	0	5
320 Ponce School of Medicine	7	0	0	7	0	0
Total, 1st 320 insts.	286,752	26,530	14,883	82,719	62,877	99,743
321 Mercer University	3	0	0	0	3	0
322 Smith College	1	0	0	0	1	0
323 Woods Hole Oceanographic Institution	0	0	0	0	0	0
324 Univ of Health Sciences (Kansas City)	0	0	0	0	0	0
325 Kirksville College of Osteopathic Med	0	0	0	0	0	0
326 Chicago Coll of Osteo Medicine	0	0	0	0	0	0
327 Phila College of Osteopathic Medicine	0	0	0	0	0	0
328 NE Ohio Univ Med School	0	0	0	0	0	0
329 Univ of Texas MD Anderson Cancer Center	0	0	0	0	0	0
330 West Virginia Sch of Osteopathic Med	0	0	0	0	0	0
Total, 1st 330 insts.	286,756	26,530	14,883	82,719	62,881	99,743
331 Providence College	0	0	0	0	0	0
332 Morehouse School of Medicine	0	0	0	0	0	0
333 Charles R. Drew Univ of Medicine & Sci	0	0	0	0	0	0
Total, 1st 333 insts.	286,756	26,530	14,883	82,719	62,881	99,743

NOTE: Includes medical schools

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table F-11. Graduate science and engineering students in doctorate-granting institutions, ranked by 1991 total graduate science and engineering students: 1984-91**

Page 1 of 6

Institutional ranking	1984	1985	1986	1987	1988	1989	1990	1991
Total, all institutions	344,655	353,696	364,234	368,358	373,909	379,521	384,911	411,296
1 University of Wisconsin - Madison	5,346	5,181	5,169	5,220	5,335	5,506	5,443	5,914
2 University of Minnesota	5,223	5,595	5,524	5,320	5,479	5,607	5,579	5,720
3 University of Southern California	7,046	8,051	7,866	7,474	7,034	6,397	5,679	5,575
4 Ohio State University	4,575	4,739	5,050	5,088	4,984	4,926	5,080	5,439
5 University of Michigan	4,455	4,557	4,672	4,882	4,883	5,079	5,066	5,252
6 Texas A & M University	3,929	3,795	4,019	4,194	4,409	4,635	4,927	5,009
7 University of Calif at Berkeley	5,300	5,207	5,297	5,337	5,099	5,057	5,202	4,979
8 Univ of Texas at Austin	4,464	4,328	4,390	4,390	4,420	4,436	4,717	4,971
9 University of Illinois at Urbana	4,153	4,470	4,693	4,854	4,805	4,842	4,945	4,938
10 University of Colorado	3,025	2,929	3,378	3,617	3,598	3,551	3,873	4,544
Total, 1st 10 insts.	47,516	48,852	50,058	50,376	50,046	50,036	50,511	52,341
11 George Washington University	3,684	3,532	4,372	4,609	4,623	4,190	4,425	4,544
12 University of Washington	4,111	4,187	4,072	4,084	4,201	4,128	4,290	4,454
13 Stanford University	4,134	4,135	4,043	4,131	4,144	4,165	4,263	4,422
14 Pennsylvania State University	3,628	3,781	4,129	4,046	4,245	4,348	4,140	4,419
15 Rutgers the State University	3,985	3,894	4,163	4,033	4,018	3,928	4,178	4,375
16 Massachusetts Institute of Technology	3,996	4,045	4,065	3,962	3,951	4,165	4,207	4,243
17 University of Calif at Los Angeles	3,692	3,840	3,792	4,027	4,117	4,168	3,857	4,171
18 Indiana University	2,411	1,869	2,513	2,630	2,659	3,473	3,933	4,135
19 Purdue University	3,556	3,622	3,725	3,851	4,058	4,040	3,915	4,022
20 University of Pittsburgh	4,203	3,858	3,756	3,819	3,679	3,635	3,852	3,944
Total, 1st 20 insts.	84,896	85,615	88,688	89,571	89,741	90,276	91,571	95,070
21 University of Maryland - College Park	3,333	3,439	3,515	3,592	3,684	3,860	3,931	3,876
22 University of Florida	3,049	3,244	3,305	2,974	3,042	3,097	3,588	3,741
23 Harvard University	3,013	3,216	3,266	2,975	3,163	3,069	2,602	3,472
24 Cornell University	3,007	3,103	3,361	3,365	3,388	3,416	3,408	3,453
25 SUNY - Buffalo	2,838	2,738	2,823	3,063	3,150	3,125	2,974	3,445
26 University of Arizona	3,435	3,582	3,752	3,631	3,629	3,474	3,377	3,391
27 University of Illinois at Chicago	2,708	2,638	2,813	2,728	2,835	3,074	3,121	3,355
28 Georgia Institute of Technology	2,339	2,271	2,554	2,666	2,677	2,766	2,972	3,326
29 Arizona State University	2,219	2,435	2,341	2,403	2,654	2,889	3,025	3,318
30 New York University	3,322	3,680	3,200	3,152	2,856	2,818	2,790	3,315
Total, 1st 30 insts.	114,159	115,961	119,618	120,120	120,817	121,864	123,359	129,762
31 University of Massachusetts	2,458	2,594	2,669	2,611	3,178	3,130	3,026	3,262
32 University of Houston-University Park	1,486	1,622	1,895	1,828	1,655	2,082	2,578	3,209
33 North Carolina State Univ at Raleigh	2,729	2,690	2,964	2,883	3,031	3,114	3,076	3,115
34 Virginia Polytechnic Inst and State Uni	2,710	3,377	3,377	3,324	2,991	3,122	3,161	3,113
35 Michigan State University	2,897	2,866	3,087	2,947	2,845	3,051	2,993	3,103
36 Univ of North Carolina at Chapel Hill	2,393	2,426	2,539	2,692	2,669	2,846	2,947	3,101
37 Wayne State University	2,255	2,333	2,151	2,139	2,289	2,930	3,155	3,056
38 Columbia University Main Division	3,020	3,065	3,126	2,990	2,895	2,945	2,889	2,964
39 Louisiana State University System	2,573	2,485	2,396	2,462	2,407	2,334	2,582	2,848
40 Iowa State University of Sci & Tech	2,491	2,578	2,619	2,659	2,714	2,680	2,755	2,818
Total, 1st 40 insts.	139,171	141,999	146,441	146,655	147,491	150,098	152,521	160,351
41 University of Tennessee at Knoxville	2,389	2,419	2,484	2,368	2,464	2,735	2,530	2,789
42 University of Cincinnati	2,406	2,384	2,389	2,368	2,421	2,422	2,371	2,721
43 Boston University	2,096	2,241	2,359	2,361	2,211	2,229	2,409	2,631
44 Northeastern University	2,825	2,699	2,598	2,435	2,359	2,241	2,258	2,581
45 University of Calif at Davis	2,571	2,662	2,744	2,608	2,587	2,668	2,717	2,579
46 University of Connecticut	1,966	2,025	2,163	2,270	2,282	2,290	2,227	2,551
47 University of Pennsylvania	2,436	2,523	2,510	2,437	2,415	2,521	2,526	2,533
48 University of Oklahoma	2,094	2,165	2,036	2,269	2,225	2,122	2,412	2,529
49 University of Iowa	1,927	1,972	2,084	2,068	2,171	2,140	2,301	2,420
50 SUNY - Stony Brook	1,998	2,026	2,109	2,194	2,321	2,290	2,019	2,406
Total, 1st 50 insts.	161,879	165,095	169,897	170,033	170,947	173,756	176,291	186,091
51 University of Kansas	2,215	2,124	2,049	2,041	2,091	2,191	2,257	2,403
52 University of South Florida	986	1,155	1,304	1,259	1,688	1,667	2,004	2,334
53 George Mason University	781	1,065	1,221	1,568	1,903	2,050	2,275	2,299
54 San Diego State University	1,586	1,885	1,893	1,992	1,960	2,013	2,037	2,166
55 Syracuse University	2,292	2,108	2,188	2,138	2,195	2,135	2,154	2,164
56 University of Hawaii at Manoa	1,702	1,705	1,820	1,822	1,829	1,857	1,981	2,092
57 Univ of Texas at Arlington	1,787	1,806	1,858	1,874	1,882	1,910	1,783	2,087
58 University of Massachusetts Lowell	1,738	1,805	1,932	2,020	2,088	1,582	2,059	2,049
59 Rensselaer Polytechnic Institute	1,822	1,761	1,841	1,778	1,668	1,795	1,852	2,036
60 Columbia University Teachers College	1,713	1,753	1,758	1,751	1,987	1,884	1,928	2,030
Total, 1st 60 insts.	178,501	182,262	187,761	188,274	190,238	192,840	196,621	207,751

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-11. Graduate science and engineering students in doctorate-granting institutions, ranked by 1991 total graduate science and engineering students: 1984-91**

Page 2 of 6

Institutional ranking	1984	1985	1986	1987	1988	1989	1990	1991
61 University of Utah	1,829	1,878	1,900	1,879	1,754	1,808	1,836	2,025
62 University of Kentucky	1,640	1,632	1,633	1,680	1,649	1,886	1,673	2,019
63 Colorado State University	1,734	1,722	1,756	1,804	1,870	1,864	1,870	2,010
64 Northwestern University	1,665	1,741	1,711	1,827	1,898	1,962	1,911	2,007
65 University of Missouri - Columbia	1,925	1,890	1,951	1,888	1,849	1,833	1,775	1,983
66 University of Virginia	1,631	1,763	1,848	1,874	1,846	1,698	1,853	1,943
67 University of Calif at San Diego	1,303	1,404	1,528	1,616	1,528	1,625	1,790	1,902
68 University of South Carolina	1,671	1,620	1,801	1,895	1,683	1,827	1,770	1,892
69 Johns Hopkins University	1,395	1,512	1,528	1,484	1,647	1,694	1,744	1,880
70 Oregon State University	1,732	1,673	1,797	1,779	1,740	1,722	1,765	1,861
Total, 1st 70 insts.	195,026	199,097	205,214	206,000	207,702	210,759	214,608	227,273
71 Yale University	1,577	1,791	1,841	1,926	1,938	1,930	1,918	1,861
72 Virginia Commonwealth University	974	998	1,168	1,301	1,412	1,498	1,759	1,853
73 New Jersey Institute of Technology	1,655	1,907	2,102	2,419	2,658	2,647	2,283	1,848
74 Auburn University	1,098	1,227	1,303	1,340	1,391	1,517	1,699	1,844
75 CUNY Graduate School and Univ Center	1,767	1,665	1,853	2,026	2,047	2,055	1,786	1,841
76 University of Chicago	1,427	1,503	1,625	1,741	1,757	1,969	2,016	1,830
77 University of Wisconsin - Milwaukee	1,620	1,628	1,630	1,691	1,698	1,709	1,594	1,827
78 Illinois Institute of Technology	1,745	1,781	1,583	1,632	1,654	1,510	1,776	1,818
79 Oklahoma State University	1,427	1,439	1,529	1,577	1,542	1,690	1,721	1,813
80 University of New Mexico	1,456	1,533	1,556	1,665	1,623	1,692	1,674	1,810
Total, 1st 80 insts.	209,772	214,569	221,404	223,318	225,422	228,976	232,834	245,618
81 Clemson University	1,173	1,224	1,311	1,333	1,396	1,451	1,500	1,795
82 University of Nebraska - Lincoln	1,431	1,359	1,351	1,407	1,415	1,457	1,558	1,756
83 Western Michigan University	1,282	1,253	1,345	1,540	1,392	1,342	1,479	1,691
84 Case Western Reserve University	1,848	1,921	1,947	2,236	1,769	1,692	1,793	1,669
85 Polytechnic University	1,743	1,929	2,324	2,066	2,028	2,050	1,974	1,667
86 University of Georgia	1,555	1,436	1,465	1,576	1,525	1,501	1,553	1,666
87 The American University	1,442	1,720	1,600	1,645	1,371	1,476	1,559	1,656
88 Carnegie-Mellon University	1,198	1,419	1,535	1,512	1,563	1,609	1,657	1,656
89 West Virginia University	1,498	1,412	1,339	1,242	1,352	1,396	1,522	1,643
90 Southern Illinois Univ at Carbondale	1,289	1,433	1,512	1,666	1,638	1,625	1,423	1,618
Total, 1st 90 insts.	224,231	229,675	237,133	239,541	240,871	244,575	248,852	262,435
91 Texas Woman's University	1,977	1,928	1,976	1,864	1,883	2,044	1,810	1,609
92 University of Akron	1,225	1,337	1,398	1,448	1,505	1,526	1,403	1,609
93 Antioch University	0	0	0	0	1,133	1,019	1,146	1,593
94 Temple University	1,242	1,242	1,108	1,203	1,237	1,355	1,375	1,592
95 Drexel University	1,208	1,336	1,362	1,391	1,318	1,276	1,410	1,566
96 Kansas State University	1,377	1,345	1,409	1,450	1,505	1,533	1,532	1,532
97 University of Calif at Santa Barbara	1,344	1,347	1,368	1,401	1,328	1,440	1,525	1,530
98 Washington University	1,038	1,080	1,200	1,325	1,377	1,437	1,593	1,510
99 Florida State University	1,112	1,137	1,190	1,110	1,219	1,425	1,463	1,503
100 De Paul University	969	1,159	1,191	1,295	1,273	1,400	1,358	1,489
Total, 1st 100 insts.	235,723	241,586	249,335	252,028	254,649	259,030	263,487	277,968
101 Texas Tech University	1,140	1,143	1,071	1,077	1,044	1,167	1,273	1,464
102 University of Delaware	1,112	1,150	1,189	1,303	1,198	1,179	1,148	1,447
103 The University of Alabama at Birmingham	897	980	1,120	1,270	1,387	1,449	1,124	1,446
104 University of Rochester	1,165	1,221	1,257	1,181	1,318	1,361	1,396	1,422
105 Duke University	976	1,060	1,166	1,216	1,283	1,299	1,388	1,412
106 University of Central Florida	971	1,062	1,113	1,151	1,052	1,047	1,198	1,403
107 Long Island University	1,996	1,500	1,655	1,534	1,515	1,245	1,490	1,403
108 SUNY - Albany	843	1,123	1,153	1,168	1,077	1,088	1,264	1,384
109 Princeton University	1,137	1,164	1,177	1,182	1,248	1,327	1,307	1,374
110 Washington State University	1,411	1,440	1,398	1,362	1,276	1,191	1,271	1,353
Total, 1st 110 insts.	247,371	253,429	261,634	264,472	267,047	271,383	276,346	292,076
111 University of Calif at Irvine	931	992	1,027	1,109	1,161	1,215	1,277	1,344
112 Stevens Institute of Technology	1,455	1,573	1,622	1,642	1,666	1,435	1,255	1,343
113 US Naval Postgraduate School	1,171	1,302	1,260	1,204	1,331	1,349	1,388	1,340
114 University of Rhode Island	1,091	1,126	1,196	1,286	1,217	1,278	1,116	1,339
115 University of Miami	1,024	1,106	1,080	1,174	1,196	1,157	1,180	1,289
116 University of Arkansas	984	971	943	956	858	857	911	1,269
117 Old Dominion University	931	906	950	986	1,091	1,104	1,197	1,267
118 CUNY City College	710	751	959	896	894	716	854	1,263
119 University of Missouri - Rolla	1,095	1,159	1,246	1,282	1,239	1,231	1,224	1,261
120 Utah State University	1,207	1,078	1,207	1,163	1,213	1,247	1,234	1,248
Total, 1st 120 insts.	257,970	264,393	273,124	276,172	278,913	282,972	287,982	305,039

See explanatory information, if any, and SOURCE(S) at end of table.



**Table F-11. Graduate science and engineering students in doctorate-granting institutions, ranked by 1991 total graduate science and engineering students: 1984-91**

Page 3 of 6

Institutional ranking	1984	1985	1986	1987	1988	1989	1990	1991
121 Tulane University of Louisiana	850	893	905	893	931	947	1,009	1,232
122 Northern Illinois University	830	829	883	905	973	977	1,167	1,231
123 Santa Clara University	1,422	1,580	1,665	1,619	1,642	1,494	1,293	1,222
124 SUNY - Binghamton	1,137	1,159	1,131	1,106	1,161	1,199	1,182	1,214
125 University of Puerto Rico - Rio Piedras	1,239	1,263	1,265	1,135	1,041	1,097	1,235	1,213
126 Univ of Texas at Dallas	898	946	963	975	1,088	1,169	1,179	1,195
127 Cleveland State University	993	989	940	1,008	1,104	1,060	1,125	1,179
128 Mississippi State University	1,014	949	927	1,044	1,075	1,090	1,087	1,161
129 University of Louisville	1,053	966	977	1,038	1,126	1,141	1,115	1,156
130 University of North Texas	1,400	1,244	1,202	1,158	1,218	1,221	1,206	1,152
Total, 1st 130 insts.	288,806	275,211	263,982	287,053	290,272	294,367	299,580	316,994
131 Georgia State University	1,025	884	926	928	984	1,068	943	1,149
132 Pace University	1,153	1,079	1,375	1,181	1,121	1,155	990	1,144
133 Wright State University	701	743	759	861	921	961	993	1,144
134 California Institute of Technology	995	998	992	965	1,010	1,065	1,088	1,125
135 University of Maryland - Balt Prof Sch	743	716	819	812	827	921	965	1,069
136 University of Idaho	776	775	778	837	887	960	1,048	1,068
137 Kent State University	842	880	899	901	911	961	1,029	1,059
138 The University of Alabama in Huntsville	517	609	627	742	826	940	970	1,051
139 Portland State University	573	630	676	692	778	815	892	1,051
140 Tufts University	688	765	744	854	932	1,002	996	1,044
Total, 1st 140 insts.	276,799	283,290	292,577	295,826	299,519	304,215	309,494	327,898
141 University of Calif at San Francisco	856	873	940	985	1,024	1,028	1,025	1,034
142 University of Wyoming	779	813	760	759	717	802	715	1,029
143 Florida Institute of Technology	954	1,025	1,053	1,103	999	1,024	894	1,028
144 University of Maryland - Baltimore Cnty	396	419	583	507	831	835	913	1,026
145 Lehigh University	932	964	1,017	944	974	1,018	764	1,022
146 Vanderbilt University	709	753	739	795	839	1,001	996	1,016
147 Ohio University	1,007	897	930	998	1,000	986	388	1,014
148 Brigham Young University	885	1,030	1,047	1,001	829	673	630	1,013
149 Fairleigh Dickinson University	1,241	1,252	794	1,027	993	859	912	1,005
150 University of Denver	771	731	663	652	691	644	981	991
Total, 1st 150 insts.	285,329	292,047	301,083	304,597	308,416	313,085	317,712	338,076
151 Emory University	709	704	743	752	769	852	1,013	986
152 Univ of Texas Hlth Sci Ctr at Houston	670	655	690	703	749	832	919	962
153 Villanova University	982	1,001	1,061	979	958	902	844	959
154 New Mexico State University	792	793	843	900	903	856	883	956
155 Memphis State University	865	943	979	820	846	898	896	952
156 Wichita State University	775	756	772	896	905	881	810	945
157 Nova University	476	720	436	1,260	1,202	1,143	923	940
158 Northern Arizona University	558	726	612	889	729	804	953	939
159 The University of Alabama	641	682	734	775	714	768	757	901
160 University of Dayton	576	654	806	947	830	775	763	896
Total, 1st 160 insts.	292,373	299,681	308,759	313,318	317,021	321,786	326,473	347,512
161 Flonda International University	0	0	0	0	580	703	771	893
162 New York Institute of Technology	949	898	928	884	948	961	939	887
163 Catholic University of Amenca	1,081	1,081	1,037	1,032	980	916	940	883
164 Worcester Polytechnic Institute	652	708	773	606	732	707	748	882
165 University of Nevada at Reno	561	557	515	619	656	721	841	871
166 St. Louis University	817	776	779	744	777	622	613	870
167 Flonda Atlantic University	438	446	475	499	512	490	742	860
168 New School for Social Research	1,328	1,273	1,135	555	1,080	1,066	984	848
169 University of Oregon	762	757	740	754	794	776	776	830
170 Rice University	740	757	795	840	750	789	800	825
Total, 1st 170 insts.	299,701	306,934	315,936	319,851	324,830	329,537	334,627	356,161
171 University of Notre Dame	672	667	658	672	755	756	807	822
172 Southern Methodist University	802	736	770	895	974	952	848	815
173 Marquette University	631	708	764	828	819	814	707	808
174 University of Mississippi	580	566	640	601	709	750	739	805
175 Univ of Texas at El Paso	777	737	676	703	736	701	766	799
176 Adelphi University	1,067	1,012	971	519	491	545	948	798
177 University of Missouri - Kansas City	518	629	718	866	745	788	645	790
178 Colorado School of Mines	442	616	803	774	700	679	644	781
179 Howard University	1,059	947	842	896	888	751	781	778
180 Brown University	743	757	797	788	801	785	769	761
Total, 1st 180 insts.	306,992	314,309	323,575	327,393	332,430	337,038	342,281	364,118

See explanatory information, if any, and SOURCE(S) at end of table.

**BEST COPY AVAILABLE**



**Table F-11. Graduate science and engineering students in doctorate-granting institutions, ranked by 1991 total graduate science and engineering students: 1984-91**

Page 4 of 6

Institutional ranking	1984	1985	1986	1987	1988	1989	1990	1991
181 Loyola University of Chicago	625	582	561	580	587	608	570	755
182 University of Toledo	765	786	729	728	583	666	700	751
183 Oakland University	478	559	602	622	652	701	668	750
184 Georgetown University	874	1,251	1,259	1,022	884	886	590	750
185 CUNY Hunter College	833	913	843	786	774	573	644	749
186 University of Calif at Riverside	732	769	727	735	701	672	711	733
187 University of Puerto Rico Med Sci Campu	404	453	411	403	558	601	524	724
188 University of Maine	580	523	538	614	649	667	660	711
189 St John's University	627	586	677	620	620	628	692	705
190 University of New Hampshire	518	551	570	548	599	603	674	697
Total, 1st 190 insts.	313,428	321,262	330,492	334,049	339,037	343,643	348,714	371,443
191 Boston College	498	511	523	521	538	614	623	678
192 University of Detroit	530	503	540	579	526	588	564	668
193 University of Vermont & St Agric Colleg	659	616	630	605	650	618	625	648
194 Yeshiva University	552	599	561	586	600	666	590	632
195 South Dakota State University	386	432	431	431	429	441	493	629
196 University of Calif at Santa Cruz	403	433	455	462	455	555	608	628
197 Calif Sch of Prof Psych - San Diego	389	401	415	430	434	480	519	617
198 North Dakota State University	555	589	614	574	620	615	560	615
199 University of Southwestern Louisiana	684	693	633	560	490	534	538	607
200 Bowling Green State University	515	487	509	536	589	596	581	600
Total, 1st 200 insts.	318,599	326,526	335,803	339,333	344,368	349,350	354,415	377,765
201 Fordham University	633	598	480	543	461	470	566	598
202 Air Force Institute of Technology	639	551	524	580	596	548	563	589
203 Univ of North Carolina at Greensboro	517	503	500	494	451	447	512	585
204 University of Southern Mississippi	606	657	683	610	605	661	540	584
205 Hahnemann University	284	282	391	394	494	406	506	572
206 Illinois State University	442	465	449	541	557	567	523	570
207 Union Institute	293	444	470	476	471	488	501	556
208 Claremont Univ Center & Graduate School	205	207	448	480	517	502	511	552
209 Seton Hall University	319	322	300	297	313	278	278	540
210 Calif Sch of Prof Psych - Los Angeles	330	424	428	438	452	501	585	534
Total, 1st 210 insts.	322,867	330,979	340,476	344,186	349,285	354,218	359,590	383,445
211 University of Montana	537	470	435	430	421	456	497	525
212 Montana State University	493	510	476	461	520	515	460	521
213 Calif Sch of Prof Psych-Berkeley/Alamed	361	391	426	423	455	501	512	519
214 University of South Alabama	229	261	305	345	392	453	494	515
215 Lamar University	334	304	330	282	303	320	339	512
216 Hofstra University	350	516	507	553	580	599	549	508
217 Baylor University	254	304	289	289	334	422	474	504
218 Univ of Texas Hlth Sci Ctr San Antonio	281	277	292	302	309	427	108	500
219 US International University	513	540	630	613	547	497	519	492
220 Miami University	494	521	505	546	477	454	437	485
Total, 1st 220 insts.	326,713	335,073	344,671	348,430	353,623	358,862	363,979	388,526
221 Michigan Technological University	350	334	383	398	417	442	464	483
222 University of Alaska at Fairbanks	352	381	399	387	404	444	487	480
223 Rush University	330	342	376	394	434	487	471	479
224 The Fielding Institute	436	449	447	471	434	470	473	478
225 Loma Linda University	512	649	537	453	489	464	459	458
226 Idaho State University	232	266	257	336	338	388	462	444
227 University of Puerto Rico	395	415	427	397	374	364	358	439
228 Ball State University	518	473	477	573	328	333	421	429
229 Brandeis University	314	311	342	366	375	392	416	428
230 SUNY - Coll of Env Science and Forestry	348	356	381	355	377	420	455	427
Total, 1st 230 insts.	330,500	339,049	348,697	352,560	357,593	363,066	368,445	393,081
231 East Carolina University	448	374	373	354	364	382	363	402
232 Duquesne University	303	283	306	315	299	314	380	401
233 East Tennessee State University	193	206	241	262	356	318	343	390
234 Caribbean Center for Advanced Studies	347	373	371	248	237	213	216	386
235 Indiana State University	282	282	297	311	302	335	280	372
236 College of William and Mary	291	293	314	303	310	302	334	371
237 University of Northern Colorado	133	192	456	552	419	262	339	367
238 Calif Sch of Prof Psych - Fresno	195	166	194	202	207	235	251	366
239 California Institute of Integral Studie	89	184	208	240	247	300	250	362
240 Dartmouth College	285	293	308	298	339	352	339	362
Total, 1st 240 insts.	333,066	341,695	351,765	355,645	360,673	366,079	371,540	396,860

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-11. Graduate science and engineering students in doctorate-granting institutions, ranked by 1991 total graduate science and engineering students: 1984-91**

Page 5 of 6

Institutional ranking	1984	1985	1986	1987	1988	1989	1990	1991
241 Sam Houston State University	373	352	376	391	373	328	343	362
242 Univ of Texas Med Branch at Galveston	166	198	235	248	213	231	162	355
243 Univ of Texas SW Medical Ctr at Dallas	260	265	276	257	298	317	320	355
244 East Texas State University	505	501	481	36	348	377	363	346
245 Fuller Theological Seminary	180	176	186	245	280	295	338	343
246 Pacific Grad School of Prof Psych	172	182	213	246	0	347	368	341
247 Central Michigan University	393	397	399	363	316	312	298	335
248 Tennessee Technological University	185	193	233	267	264	285	284	323
249 Baylor College of Medicine	149	162	182	197	224	266	285	303
250 Louisiana Tech University	267	290	279	242	227	263	230	301
Total, 1st 250 Insts.	335,736	344,411	354,625	358,137	363,216	369,100	374,531	400,224
251 University of North Dakota	351	360	356	341	327	332	326	301
252 Univ of Med and Dent of New Jersey	209	210	219	240	282	252	266	291
253 Medical College of Ohio at Toledo	42	171	162	214	222	255	167	290
254 Clarkson University	337	343	348	319	320	308	312	286
255 Andrews University	0	0	0	0	181	189	275	263
256 Clark Atlanta University	0	0	0	0	0	312	279	282
257 University of Missouri - St Louis	284	274	323	303	309	313	316	281
258 University of Tulsa	253	286	290	325	300	257	260	280
259 Clark University	217	237	238	225	237	238	253	275
260 South Dakota School of Mines and Tech	228	209	202	232	236	274	234	274
Total, 1st 260 Insts.	337,657	348,501	356,763	360,336	365,630	371,830	377,219	403,067
261 University of Nebraska Medical Center	255	218	186	207	225	263	277	272
262 Thomas Jefferson University	71	72	74	115	118	137	158	269
263 Marshall University	155	203	236	244	236	216	237	261
264 New Mexico Institute of Mining and Tech	216	225	248	250	234	217	245	253
265 Wake Forest University	175	181	178	160	179	206	219	241
266 University of South Dakota	162	167	185	193	186	200	260	236
267 University of Arkansas - Med Sci Campus	198	210	218	222	195	172	197	226
268 University of Tennessee, Memphis	144	142	160	182	194	207	215	213
269 Oregon Grad Inst of Science & Technolog	122	146	152	155	178	148	188	213
270 Forest Institute of Prof Psych	146	154	190	251	254	260	256	206
Total, 1st 270 Insts.	339,301	348,219	358,590	362,315	367,629	373,856	379,471	405,457
271 New York Medical College	359	380	344	386	391	290	257	203
272 Stephen F. Austin State University	313	269	274	237	206	205	200	201
273 Medical College of Georgia	151	175	182	196	200	214	101	200
274 Northeast Louisiana University	190	187	175	185	186	188	195	200
275 The Wright Institute	184	145	154	154	161	174	207	199
276 Golden Gate University	775	691	593	847	754	618	354	192
277 Biola University	124	171	168	160	166	173	190	188
278 Florida A & M University	57	66	63	65	135	130	128	182
279 Medical University of South Carolina	81	87	111	85	88	108	164	167
280 CUNY Mt. Sinai Sch of Medicine	0	0	0	115	130	135	146	164
Total, 1st 280 Insts.	341,535	350,390	360,654	364,745	370,046	376,091	381,413	407,353
281 Bryn Mawr College	167	152	138	133	127	116	114	154
282 University of the Pacific	92	87	124	141	165	156	144	154
283 Texas Christian University	145	140	136	133	135	143	153	143
284 Indiana University of Pennsylvania	0	0	0	0	83	103	123	140
285 Union College(NY)	204	251	311	209	175	133	144	140
286 Spalding University	144	138	132	167	167	151	112	140
287 Xavier University	0	0	0	0	0	76	76	135
288 Chicago School of Prof Psych	131	100	103	130	176	144	158	134
289 University of Health Sciences (Chicago)	87	84	139	119	148	117	119	131
290 Rockefeller University	117	115	121	117	117	121	128	128
Total, 1st 290 Insts.	342,622	351,457	361,858	365,894	371,319	377,351	382,684	408,752
291 Wesleyan University	105	114	117	121	121	115	121	128
292 Mayo Graduate School	32	46	46	53	55	74	98	120
293 Oregon Health Sciences University	45	56	64	74	90	88	25	119
294 Eastern Virginia Medical School	69	74	71	73	78	70	111	118
295 Uniformed Serv Univ of the Hlth Science	94	99	100	108	116	126	123	118
296 University of Northern Iowa	99	101	107	91	89	83	102	117
297 Creighton University	56	144	139	150	165	136	76	116
298 Mercer University	0	0	0	107	136	144	88	116
299 SUNY - Health Sci Ctr at Brooklyn	80	79	80	83	93	100	108	115
300 Alfred University	130	122	184	161	124	143	139	115
Total, 1st 300 Insts.	343,332	352,292	362,766	366,915	372,366	378,430	383,675	409,934

See e: natory information, if any, and SOURCE(S) at end of table.

**Table F-11. Graduate science and engineering students in doctorate-granting institutions, ranked by 1991 total graduate science and engineering students: 1984-91**

Page 6 of 6

Institutional ranking	1984	1985	1986	1987	1988	1989	1990	1991
301 The Medical College of Pennsylvania	67	69	60	90	86	92	100	109
302 University of Maryland Eastern Shore	0	0	0	0	39	62	82	104
303 Medical College of Wisconsin	53	57	68	61	60	84	91	102
304 Texas College of Osteopathic Medicine	35	51	58	60	59	70	79	89
305 Albany Medical College Grad Studies Pro	70	77	92	93	110	100	86	87
306 SUNY - Health Sci Ctr at Syracuse	53	43	47	57	55	60	51	82
307 Maharishi International University	0	0	0	0	31	68	77	78
308 Univ. of Osteopathic Med & Health Sci	0	0	0	0	0	0	68	74
309 Emerson College	0	0	0	0	69	74	58	72
310 Institute of Paper Science & Technology	100	99	91	95	69	45	57	70
Total, 1st 310 insts.	343,710	352,688	363,182	367,371	372,964	379,085	384,424	410,801
311 CUNY Herbert H. Lehman College	56	54	113	73	75	75	78	61
312 Rand Graduate School of Policy Studies	57	60	62	70	60	60	48	60
313 Philadelphia Coll of Pharmacy and Sci	36	53	58	55	52	46	61	60
314 Meharry Medical College	37	41	32	34	36	35	47	54
315 Catholic University of Puerto Rico	51	48	46	58	0	0	54	52
316 Baylor College of Dentistry	58	58	46	52	56	57	47	48
317 Mass College of Pharmacy/Allied Health	56	65	65	40	47	39	41	46
318 University of New England	0	0	0	0	0	0	29	41
319 Institute of Textile Technology	16	16	28	31	35	30	30	30
320 SUNY State College of Optometry	7	15	14	19	33	33	28	22
Total, 1st 320 insts.	344,084	353,098	363,646	367,803	373,358	379,460	384,887	411,275
321 Ponce School of Medicine	0	0	0	0	21	22	19	15
322 Smith College	4	4	4	4	5	6	5	6
323 University of New Orleans	0	0	0	0	0	0	0	0
324 University of Massachusetts at Worcesre	0	0	0	0	0	0	0	0
325 University of Dallas	0	0	0	0	0	0	0	0
326 Univ of Texas MD Anderson Cancer Center	0	0	0	0	0	0	0	0
327 Rosemead Graduate School of Psychology	0	0	0	0	0	0	0	0
328 Phila College of Osteopathic Medicine	8	9	0	0	0	0	0	0
329 Desert Research Institute	0	0	0	0	0	0	0	0
330 Heed University	0	0	0	0	0	0	0	0
Total, 1st 330 insts.	344,096	353,111	363,650	367,807	373,384	379,488	384,911	411,296
331 George Peabody College for Teachers	0	0	0	0	0	0	0	0
332 University of Oklahoma - Norman	0	0	0	0	0	0	0	0
333 Chicago Coll of Osteo Medicine	0	0	0	0	0	0	0	0
334 NE Ohio Univ Med School	0	0	0	0	0	0	0	0
335 Univ of Illinois Med Center - Chicago	0	0	0	0	0	0	0	0
336 Oral Roberts University	39	34	27	25	23	33	0	0
337 Univ of Health Sciences (Kansas City)	0	0	0	0	0	0	0	0
338 Coll of Osteopathic Med of the Pacific	0	0	0	0	0	0	0	0
339 Woods Hole Oceanographic Institution	106	112	125	120	113	0	0	0
340 Providence College	0	0	0	0	0	0	0	0
Total, 1st 340 insts.	344,241	353,257	363,802	367,952	373,520	379,521	384,911	411,296
341 University of Oklahoma Health Sci Cente	0	0	0	0	0	0	0	0
342 Atlanta University	411	436	425	406	389	0	0	0
343 Oklahoma Coll of Osteo Med & Surgery	0	0	0	0	0	0	0	0
344 Morehouse School of Medicine	0	0	0	0	0	0	0	0
345 Kirksville College of Osteopathic Med	3	3	7	0	0	0	0	0
346 University of Massachusetts at Amherst	0	0	0	0	0	0	0	0
347 West Virginia Sch of Osteopathic Med	0	0	0	0	0	0	0	0
348 Charles R. Drew Univ of Medicine & Sci	0	0	0	0	0	0	0	0
Total, 1st 348 insts.	344,655	353,696	364,234	368,358	373,909	379,521	384,911	411,296

NOTE: Includes medical schools

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table F-12. Graduate science students in doctorate-granting institutions,  
ranked by 1991 total graduate science students: 1984-91**

Page 1 of 6

Institutional ranking	1984	1985	1986	1987	1988	1989	1990	1991
Total, all institutions	219,837	225,497	229,299	232,220	236,615	240,883	245,251	255,631
1 University of Wisconsin - Madison	3,865	3,696	3,679	3,655	3,691	3,807	3,919	4,031
2 University of Minnesota	3,438	3,740	3,828	3,689	3,813	3,884	3,851	3,954
3 Indiana University	1,706	1,768	1,793	1,879	1,910	2,548	3,145	3,379
4 Texas A & M University	2,834	2,701	2,855	2,944	3,024	3,143	3,276	3,363
5 Ohio State University	2,846	2,899	3,118	3,090	3,177	3,165	3,088	3,352
6 University of Illinois at Urbana	2,791	3,058	3,144	3,335	3,267	3,317	3,366	3,276
7 Rutgers the State University	3,063	3,089	3,101	2,937	3,015	3,026	3,079	3,196
8 University of Calif at Berkeley	2,911	3,032	3,096	3,137	3,008	2,939	3,060	2,946
9 New York University	2,553	3,023	2,764	2,777	2,523	2,757	2,726	2,900
10 Harvard University	2,106	2,306	2,351	2,439	2,598	2,551	2,026	2,848
Total, 1st 10 insts.	28,113	29,312	29,729	29,882	30,026	31,137	31,536	33,245
11 University of Washington	2,552	2,588	2,509	2,518	2,579	2,578	2,638	2,738
12 George Washington University	1,170	838	1,309	2,426	2,705	2,352	2,575	2,638
13 University of Colorado	2,027	1,978	2,083	2,111	2,088	2,281	2,450	2,542
14 Univ of Texas at Austin	2,700	2,750	2,778	2,428	2,417	2,435	2,458	2,538
15 University of Maryland - College Park	2,407	2,417	2,382	2,399	2,428	2,501	2,580	2,498
16 Pennsylvania State University	2,378	2,337	2,437	2,291	2,441	2,443	2,417	2,475
17 Cornell University	2,151	2,192	2,297	2,364	2,354	2,378	2,399	2,450
18 University of Southern California	2,848	2,805	2,636	2,516	2,679	2,770	2,549	2,450
19 University of Calif at Los Angeles	2,134	2,169	2,169	2,284	2,320	2,337	2,355	2,428
20 Michigan State University	2,258	2,251	2,384	2,340	2,215	2,372	2,343	2,406
Total, 1st 20 insts.	50,738	51,637	52,713	53,559	54,252	55,584	56,300	58,408
21 University of Arizona	2,422	2,536	2,608	2,440	2,500	2,421	2,367	2,388
22 University of Michigan	2,307	2,287	2,214	2,257	2,276	2,303	2,181	2,329
23 Univ of North Carolina at Chapel Hill	1,713	1,762	1,807	1,852	1,983	2,091	2,199	2,139
24 University of Massachusetts	1,586	1,636	1,746	1,694	2,094	1,995	2,003	2,087
25 Purdue University	2,012	1,994	1,995	2,008	2,145	2,129	2,075	2,051
26 Stanford University	1,681	1,799	1,781	1,817	1,872	1,961	1,961	2,007
27 University of Florida	1,808	1,877	1,906	1,854	1,917	1,933	1,948	1,972
28 Louisiana State University System	1,867	1,842	1,735	1,793	1,718	1,665	1,787	1,970
29 Massachusetts Institute of Technology	1,581	1,826	1,817	1,845	1,838	1,999	1,976	1,967
30 University of Calif at Davis	2,030	2,118	2,179	2,027	2,018	2,066	2,107	1,963
Total, 1st 30 insts.	69,745	71,314	72,501	73,146	74,613	76,147	76,904	79,281
31 Iowa State University of Sci & Tech	1,921	1,939	1,938	1,933	1,962	1,937	1,967	1,962
32 University of Pittsburgh	1,894	1,757	1,690	1,641	1,638	1,663	1,897	1,933
33 SUNY - Buffalo	1,619	1,521	1,581	1,767	1,780	1,639	1,756	1,875
34 SUNY - Stony Brook	1,594	1,595	1,631	1,588	1,642	1,696	1,765	1,861
35 University of Pennsylvania	1,837	1,906	1,851	1,805	1,815	1,868	1,868	1,836
36 North Carolina State Univ at Raleigh	1,725	1,636	1,675	1,659	1,751	1,835	1,693	1,812
37 University of Chicago	1,419	1,498	1,621	1,734	1,745	1,960	1,999	1,809
38 George Mason University	578	782	930	1,225	1,479	1,600	1,745	1,786
39 University of Houston-University Park	940	991	1,136	1,061	913	1,160	1,437	1,724
40 Arizona State University	1,137	1,241	1,189	1,228	1,447	1,544	1,469	1,686
Total, 1st 40 insts.	84,409	86,180	87,743	88,787	90,785	93,069	94,500	97,565
41 Columbia University Main Division	1,624	1,678	1,727	1,710	1,683	1,673	1,635	1,670
42 The American University	1,442	1,720	1,600	1,645	1,371	1,476	1,559	1,656
43 CUNY Graduate School and Univ Center	1,577	1,504	1,682	1,849	1,797	1,825	1,575	1,638
44 Boston University	1,132	1,132	1,233	1,263	1,328	1,272	1,514	1,637
45 University of Georgia	1,491	1,370	1,382	1,513	1,456	1,438	1,493	1,585
46 Virginia Polytechnic Inst and State Uni	1,407	1,606	1,594	1,635	1,462	1,530	1,596	1,551
47 University of Connecticut	1,154	1,184	1,288	1,371	1,361	1,351	1,371	1,548
48 University of Hawaii at Manoa	1,301	1,275	1,353	1,377	1,363	1,335	1,416	1,507
49 Antioch University	0	0	0	0	1,070	956	1,104	1,500
50 Yale University	1,237	1,410	1,451	1,543	1,535	1,569	1,516	1,446
Total, 1st 50 insts.	96,774	99,059	101,053	102,713	105,211	107,494	109,279	113,303
51 University of Illinois at Chicago	1,327	1,301	1,341	1,293	1,310	1,439	1,445	1,444
52 University of Kansas	1,427	1,335	1,277	1,258	1,254	1,338	1,342	1,418
53 University of Tennessee at Knoxville	1,516	1,462	1,417	1,412	1,487	1,570	1,368	1,412
54 De Paul University	861	1,031	1,074	1,206	1,181	1,288	1,303	1,405
55 University of Calif at San Diego	945	1,017	1,095	1,167	1,130	1,225	1,328	1,392
56 Wayne State University	1,113	1,217	1,285	1,278	1,446	1,446	1,481	1,390
57 Columbia University Teachers College	1,156	1,160	1,123	1,194	1,382	1,331	1,303	1,383
58 Colorado State University	1,229	1,209	1,216	1,272	1,295	1,255	1,257	1,353
59 University of Iowa	1,080	1,088	1,161	1,160	1,223	1,216	1,281	1,353
60 SUNY - Albany	843	1,123	1,153	1,168	1,077	1,088	1,229	1,328
Total, 1st 60 insts.	108,271	111,002	113,195	115,121	117,996	120,690	122,614	127,181

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-12. Graduate science students in doctorate-granting institutions,  
ranked by 1991 total graduate science students: 1984-91**

Page 2 of 6

institutional ranking	1984	1985	1986	1987	1988	1989	1990	1991
61 University of Kentucky	1,217	1,190	1,197	1,227	1,258	1,323	1,237	1,327
62 University of Missouri - Columbia	1,308	1,275	1,291	1,243	1,258	1,196	1,230	1,285
63 Oregon State University	1,246	1,249	1,332	1,326	1,295	1,227	1,278	1,262
64 Western Michigan University	1,086	1,058	1,159	1,280	1,085	1,082	1,131	1,255
65 San Diego State University	931	1,138	1,106	1,165	1,191	1,230	1,190	1,243
66 University of Virginia	996	1,033	1,083	1,086	1,075	1,105	1,207	1,242
67 University of Nebraska - Lincoln	1,105	1,017	1,015	1,086	1,093	1,102	1,140	1,236
68 University of Wisconsin - Milwaukee	976	1,057	1,033	1,082	1,111	1,117	1,137	1,209
69 Kansas State University	1,116	1,107	1,139	1,134	1,196	1,226	1,218	1,204
70 Florida State University	998	1,035	1,106	1,007	1,084	1,252	1,236	1,203
Total, 1st 70 insts.	119,250	122,161	124,656	126,757	129,640	132,550	134,618	139,647
71 Oklahoma State University	959	974	986	993	963	1,134	1,136	1,186
72 Northwestern University	804	1,008	1,009	1,097	1,112	1,125	1,108	1,167
73 University of Rochester	864	942	963	972	1,035	1,097	1,124	1,150
74 University of New Mexico	1,000	1,033	1,035	1,093	1,081	1,083	1,126	1,143
75 University of Oklahoma	964	1,027	983	952	923	943	1,057	1,143
76 Auburn University	777	848	833	838	855	967	1,059	1,142
77 Syracuse University	1,023	1,141	1,186	1,189	1,111	1,140	1,180	1,137
78 University of South Carolina	979	961	1,057	1,070	945	1,050	1,015	1,136
79 Virginia Commonwealth University	658	669	658	827	953	940	1,126	1,128
80 University of Cincinnati	1,168	1,180	1,028	1,053	1,064	1,070	1,097	1,127
Total, 1st 80 insts.	128,446	131,944	134,414	136,841	139,682	143,099	145,646	151,106
81 Southern Illinois Univ at Carbondale	1,100	1,069	1,053	1,119	1,086	1,089	971	1,123
82 Illinois Institute of Technology	904	908	901	962	937	849	1,132	1,117
83 Temple University	1,091	1,107	927	992	1,033	1,043	1,000	1,100
84 University of Utah	977	1,013	967	1,015	996	1,031	1,082	1,092
85 Duke University	773	795	876	941	983	973	1,048	1,074
86 University of Puerto Rico - Rio Piedras	1,163	1,143	1,146	1,004	928	998	1,100	1,055
87 Carnegie-Mellon University	601	823	891	907	962	1,008	1,034	1,054
88 Johns Hopkins University	818	874	900	831	963	973	986	1,029
89 University of North Texas	1,340	1,144	1,108	1,040	1,090	1,111	1,082	1,009
90 Texas Tech University	830	843	792	792	796	880	954	1,009
Total, 1st 90 insts.	138,043	141,663	143,975	146,444	149,456	153,054	156,035	161,768
91 University of Calif at Santa Barbara	901	940	935	963	887	964	1,025	1,008
92 Princeton University	835	848	840	850	904	968	965	997
93 Washington State University	1,086	1,088	1,020	936	907	858	897	981
94 University of Delaware	775	793	802	894	778	877	830	980
95 Northeastern University	804	863	821	816	648	792	904	961
96 Georgia State University	940	793	838	845	852	930	943	950
97 University of Calif at Irvine	713	745	734	787	826	876	934	947
98 University of Denver	662	635	595	579	615	596	929	936
99 Clemson University	626	654	675	686	711	768	769	927
100 Univ of Texas at Arlington	962	861	823	844	811	788	930	918
Total, 1st 100 insts.	146,347	149,883	152,058	154,644	157,595	161,471	165,161	171,373
101 Pace University	699	638	835	811	881	920	781	918
102 Fairleigh Dickinson University	982	984	537	797	772	714	816	913
103 Washington University	664	732	760	795	793	826	887	872
104 Utah State University	938	842	886	820	834	830	861	871
105 Long Island University	996	764	809	788	694	563	745	862
106 University of South Florida	626	659	692	686	825	801	846	856
107 New School for Social Research	1,328	1,273	1,135	555	1,080	1,066	984	848
108 Northern Illinois University	599	585	621	659	716	696	800	844
109 Georgia Institute of Technology	612	620	681	716	698	704	737	642
110 University of Massachusetts Lowell	845	910	883	962	901	709	849	838
Total, 1st 110 insts.	154,636	157,890	159,897	162,233	165,789	169,300	173,467	180,037
111 University of Miami	775	831	766	834	833	792	777	837
112 University of Oregon	762	757	740	754	794	776	776	830
113 West Virginia University	1,022	956	876	616	674	702	796	827
114 Nova University	476	682	364	1,204	1,136	1,069	849	820
115 University of Akron	701	742	765	801	799	834	800	819
116 Kent State University	608	671	691	678	665	725	778	807
117 University of Maryland - Baltimore Cnty	382	396	497	451	737	679	724	803
118 Mississippi State University	763	700	669	779	833	811	783	802
119 Univ of Texas at Dallas	792	852	830	821	901	886	889	786
120 Northern Arizona University	515	715	585	662	889	726	817	783
Total, 1st 120 insts.	161,432	165,192	166,680	169,833	173,850	177,300	181,456	188,151

See explanatory information, if any, and SOURCE(S) at end of table.



**Table F-12. Graduate science students in doctorate-granting institutions, ranked by 1991 total graduate science students: 1984-91**

Page 3 of 6

Institutional ranking	1984	1985	1986	1987	1988	1989	1990	1991
121 University of Rhode Island	765	756	745	769	728	772	772	765
122 Stevens Institute of Technology	424	995	1,299	928	914	734	626	764
123 New Jersey Institute of Technology	518	503	803	927	1,117	1,049	945	762
124 University of Wyoming	599	638	603	581	565	625	579	747
125 Brigham Young University	618	708	694	671	532	474	454	738
126 Case Western Reserve University	984	1,025	1,103	1,245	1,115	779	787	737
127 University of Calif at Riverside	732	769	727	735	701	672	711	733
128 University of Idaho	595	594	559	566	611	663	715	728
129 Memphis State University	617	688	737	607	641	675	667	719
130 Florida Institute of Technology	743	766	758	759	662	707	643	709
Total, 1st 130 Insts.	168,027	172,634	174,708	177,621	181,436	184,450	188,355	185,553
131 SUNY - Binghamton	708	679	679	685	701	714	673	703
132 New York Institute of Technology	880	817	789	758	823	881	778	702
133 California Institute of Technology	564	581	604	586	602	635	669	698
134 Vanderbilt University	519	536	508	546	560	719	696	697
135 Cleveland State University	607	592	603	593	607	664	654	693
136 Portland State University	484	489	485	497	508	503	557	693
137 Ohio University	773	648	638	688	680	688	345	682
138 Old Dominion University	653	625	638	613	641	641	668	674
139 Rensselaer Polytechnic Institute	651	649	633	572	586	597	639	663
140 New Mexico State University	620	622	664	669	666	606	618	656
Total, 1st 140 Insts.	174,486	178,872	180,949	183,828	187,810	191,098	194,652	202,414
141 Howard University	917	833	729	770	758	646	679	655
142 CUNY City College	277	375	504	375	374	366	459	650
143 Brown University	654	660	697	676	704	681	665	644
144 Georgetown University	790	1,143	1,150	951	822	793	590	633
145 University of Louisville	576	534	541	568	623	615	581	617
146 Calif Sch of Prof Psych - San Diego	389	401	415	430	434	480	519	617
147 University of Nevada at Reno	427	420	420	496	508	583	585	615
148 University of Central Florida	463	496	447	501	533	479	507	612
149 Tufts University	444	493	486	536	598	585	613	611
150 Loyola University of Chicago	485	452	447	469	462	480	570	611
Total, 1st 150 Insts.	179,908	184,679	186,765	189,600	193,626	196,606	200,420	208,679
151 Yeshiva University	531	580	542	565	580	642	585	607
152 University of Notre Dame	482	494	501	480	542	554	596	602
153 University of Arkansas	689	688	652	632	534	592	609	600
154 Fordham University	633	598	480	543	461	470	566	598
155 Tulane University of Louisiana	409	414	440	425	448	487	509	597
156 The University of Alabama at Birmingham	325	344	389	413	465	493	557	591
157 University of Calif at Santa Cruz	403	433	455	482	455	527	569	584
158 Santa Clara University	555	570	592	547	564	584	523	584
159 Wright State University	473	463	461	509	520	518	517	584
160 Rice University	482	513	517	550	501	533	542	562
Total, 1st 160 Insts.	184,890	189,776	191,814	194,726	198,696	202,206	205,973	214,608
161 Bowling Green State University	479	460	488	520	562	574	559	582
162 Polytechnic University	881	873	894	845	824	820	831	581
163 Florida International University	0	0	0	0	385	380	501	578
164 The University of Alabama	435	455	517	532	501	519	530	574
165 Drexel University	437	467	448	504	468	451	490	573
166 University of Mississippi	341	347	437	428	514	543	531	558
167 University of Maine	511	464	474	531	561	533	532	554
168 Colorado School of Mines	289	411	547	523	476	474	439	553
169 University of Missouri - Kansas City	359	446	539	667	566	583	590	552
170 Claremont Univ Center & Graduate School	205	207	448	480	517	502	511	552
Total, 1st 170 Insts.	188,827	193,906	196,606	199,756	204,070	207,585	211,487	220,265
171 Emory University	386	418	445	448	418	466	595	549
172 Villanova University	697	737	770	670	600	523	503	542
173 US Naval Postgraduate School	647	573	598	621	573	606	641	541
174 Calif Sch of Prof Psych - Los Angeles	330	424	428	438	452	501	585	534
175 University of Montana	497	443	394	395	387	435	493	520
176 Calif Sch of Prof Psych-Berkeley/Alamed	361	391	426	423	455	501	512	519
177 Union Institute	241	400	424	428	423	438	446	519
178 Texas Woman's University	660	632	652	595	588	614	591	510
179 Illinois State University	378	407	400	465	472	482	453	505
180 University of Vermont & St Agric Colleg	560	429	453	434	478	453	464	495
Total, 1st 180 Insts.	193,584	198,760	201,596	204,673	208,916	212,804	216,770	225,499

See explanatory information, if any, and SOURCE(S) at end of table.



Table F-12. Graduate science students in doctorate-granting institutions, ranked by 1991 total graduate science students: 1984-91

Page 4 of 6

Institutional ranking	1984	1985	1986	1987	1988	1989	1990	1991
181 US International University	513	540	630	613	547	497	519	482
182 North Dakota State University	440	490	501	471	519	491	441	480
183 The Fielding Institute	436	440	447	471	434	470	473	478
184 Florida Atlantic University	251	241	246	265	274	316	389	475
185 Boston College	414	399	401	387	406	440	429	464
186 University of New Hampshire	394	406	401	412	457	452	467	460
187 St John's University	376	385	371	333	358	366	429	457
188 University of Southwestern Louisiana	491	528	470	425	364	390	387	453
189 Miami University	449	476	488	505	434	414	396	443
190 University of Southern Mississippi	520	523	547	480	467	518	480	442
Total, 1st 190 insts.	197,868	203,197	206,078	209,035	213,176	216,958	221,180	230,143
191 University of Detroit	385	344	397	418	365	416	388	435
192 Univ of Texas Hlth Sci Ctr at Houston	295	287	304	318	344	384	400	428
193 Brandeis University	314	311	342	366	375	392	416	428
194 Catholic University of America	525	471	496	498	486	464	466	425
195 Hofstra University	350	453	456	496	511	507	451	402
196 CUNY Hunter College	423	483	410	384	391	432	462	399
197 Seton Hall University	153	141	146	145	151	164	154	396
198 Montana State University	370	377	364	333	372	392	373	393
199 Lehigh University	468	474	500	515	523	529	318	388
200 Hahnemann University	258	245	257	281	366	269	340	387
Total, 1st 200 insts.	201,389	206,783	209,750	212,787	217,060	220,887	224,948	234,224
201 Caribbean Center for Advanced Studies	347	373	371	248	237	213	216	386
202 St. Louis University	418	397	400	363	360	392	381	385
203 The University of Alabama in Huntsville	239	290	298	325	374	415	406	382
204 Adelphi University	493	465	438	407	391	434	407	380
205 University of Toledo	379	370	380	388	348	367	390	377
206 University of Alaska at Fairbanks	256	295	318	281	309	350	385	371
207 Calif Sch of Prof Psych - Fresno	195	186	194	202	207	235	251	366
208 Univ of Texas at El Paso	492	484	402	404	393	362	335	363
209 California Institute of Integral Studie	89	184	208	240	247	300	250	362
210 Sam Houston State University	373	352	376	391	373	328	343	362
Total, 1st 210 insts.	204,670	210,139	213,135	216,036	220,297	224,283	228,312	237,958
211 University of Maryland - Balt Prof Sch	201	219	278	287	288	317	330	355
212 College of William and Mary	289	292	313	302	310	302	328	355
213 East Texas State University	505	501	481	36	348	377	363	346
214 Baylor University	190	250	247	249	292	272	301	344
215 Fuller Theological Seminary	219	178	186	245	280	295	338	343
216 Pacific Grad School of Prof Psych	172	182	213	246	0	347	366	341
217 SUNY - Coll of Env Science and Forestry	290	297	301	283	292	331	368	338
218 Ball State University	428	382	386	449	277	276	349	335
219 Wichita State University	319	274	252	282	287	296	334	328
220 University of Missouri - Rolla	336	351	349	331	305	310	317	327
Total, 1st 220 insts.	207,610	213,083	216,141	218,746	222,978	227,406	231,708	241,370
221 Indiana State University	282	268	270	272	257	312	252	319
222 East Tennessee State University	193	206	241	212	312	269	293	317
223 Oakland University	220	199	250	243	304	310	279	311
224 Southern Methodist University	320	314	369	369	344	471	399	310
225 Univ of North Carolina at Greensboro	387	354	352	344	291	282	290	303
226 Central Michigan University	335	339	340	363	260	265	257	292
227 South Dakota State University	251	251	254	254	253	234	254	291
228 Clark Atlanta University	0	0	0	0	0	312	279	282
229 University of Missouri - St Louis	284	274	323	303	309	313	316	281
230 Clark University	217	237	238	225	237	236	253	275
Total, 1st 230 insts.	210,099	215,505	218,778	221,331	225,543	230,412	234,580	244,351
231 University of Calif at San Francisco	254	259	254	245	246	248	301	275
232 Worcester Polytechnic Institute	273	282	297	238	239	243	235	273
233 University of Puerto Rico	310	313	317	280	253	256	249	271
234 University of South Alabama	116	166	188	193	223	232	243	271
235 Univ of Texas SW Medical Ctr at Dallas	190	199	215	216	238	247	243	259
236 East Carolina University	330	283	283	265	269	278	249	259
237 Dartmouth College	210	210	219	204	219	235	235	249
238 Baylor College of Medicine	106	128	143	159	179	213	231	246
239 Univ of Med and Dent of New Jersey	146	150	149	160	205	225	217	239
240 Idaho State University	196	198	185	212	203	260	254	233
Total, 1st 240 insts.	212,230	217,693	221,028	223,503	227,817	232,647	237,037	246,926

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-12. Graduate science students in doctorate-granting institutions,  
ranked by 1991 total graduate science students: 1984-91**

Page 5 of 6

Institutional ranking	1984	1985	1986	1987	1988	1989	1990	1991
241 University of Dayton	270	234	216	275	232	187	185	229
242 University of North Dakota	289	294	288	272	262	263	263	229
243 Wake Forest University	170	176	174	158	178	206	215	229
244 Marquette University	195	203	214	234	225	230	219	223
245 Duquesne University	268	248	240	223	193	192	227	222
246 Lamar University	112	133	152	133	156	121	133	216
247 Forest Institute of Prof Psych	146	154	190	251	254	260	256	206
248 Marshall University	124	157	191	191	180	163	177	204
249 University of South Dakota	131	136	134	150	153	167	221	202
250 Stephen F. Austin State University	313	269	274	237	206	205	200	201
Total, 1st 250 insts.	214,248	219,697	223,101	225,627	229,856	234,841	239,133	249,087
251 The Wright Institute	184	145	154	154	161	174	207	199
252 Michigan Technological University	130	133	147	158	159	179	195	192
253 Golden Gate University	775	691	593	847	754	618	354	192
254 Biola University	124	171	168	160	166	173	190	188
255 New Mexico Institute of Mining and Tech	169	163	184	188	173	161	187	184
256 Thomas Jefferson University	71	72	74	74	80	90	99	183
257 University of Northern Colorado	65	80	273	349	308	147	190	182
258 University of Tulsa	130	161	183	182	167	155	148	174
259 CUNY Mt. Sinai Sch of Medicine	0	0	0	115	130	135	146	164
260 New York Medical College	157	141	124	136	127	114	107	160
Total, 1st 260 insts.	216,053	221,454	225,001	227,990	232,081	236,787	240,956	250,905
261 Air Force Institute of Technology	89	172	164	143	126	98	131	155
262 Medical University of South Carolina	81	83	107	80	82	105	146	154
263 Bryn Mawr College	167	152	138	133	127	116	114	154
264 Tennessee Technological University	59	67	84	104	109	132	135	153
265 Oregon Grad Inst of Science & Technology	80	92	87	85	112	100	125	142
266 Northeast Louisiana University	155	155	142	154	145	141	134	140
267 Indiana University of Pennsylvania	0	0	0	0	63	103	123	140
268 Chicago School of Prof Psych	131	100	103	130	176	144	158	134
269 Univ of Texas Hlth Sci Ctr San Antonio	81	83	87	97	101	124	90	133
270 Andrews University	0	0	0	0	58	59	124	131
Total, 1st 270 insts.	216,896	222,358	225,913	228,916	233,180	237,909	242,236	252,341
271 Wesleyan University	105	114	117	121	121	115	121	128
272 Rockefeller University	117	115	121	117	117	121	128	128
273 Univ of Texas Med Branch at Galveston	88	91	110	113	92	102	97	128
274 Texas Christian University	135	129	126	119	120	126	131	124
275 University of Health Sciences (Chicago)	87	84	139	119	148	113	115	124
276 Eastern Virginia Medical School	69	74	71	73	78	70	111	118
277 Oregon Health Sciences University	45	56	64	74	90	88	24	118
278 University of Puerto Rico Med Sci Campus	36	69	58	72	60	81	77	113
279 University of Tennessee, Memphis	48	53	56	83	93	106	110	112
280 Spalding University	144	138	132	142	138	119	112	107
Total, 1st 280 insts.	217,770	223,281	226,907	229,949	234,237	238,950	243,262	253,541
281 Loma Linda University	133	142	120	125	115	111	92	105
282 Mayo Graduate School	18	29	31	36	40	57	84	104
283 University of Maryland Eastern Shore	0	0	0	0	39	62	82	104
284 Medical College of Wisconsin	53	57	68	61	60	84	91	102
285 SUNY - Health Sci Ctr at Brooklyn	53	54	68	69	83	87	94	98
286 Rush University	72	77	108	90	93	92	95	92
287 Florida A & M University	29	34	33	35	85	79	78	90
288 Uniformed Serv Univ of the Hlth Science	82	82	81	84	92	92	92	88
289 Clarkson University	86	87	91	100	96	99	88	87
290 Medical College of Georgia	50	60	85	77	71	67	78	82
Total, 1st 290 insts.	218,346	223,903	227,590	230,626	235,011	239,780	244,136	254,493
291 The Medical College of Pennsylvania	67	69	42	71	69	72	72	78
292 Maharishi International University	0	0	0	0	28	68	77	78
293 South Dakota School of Mines and Tech	96	80	66	73	89	86	104	78
294 University of Northern Iowa	73	65	71	66	54	51	63	77
295 Louisiana Tech University	65	77	65	69	54	49	59	74
296 Creighton University	56	93	95	110	132	82	76	71
297 Albany Medical College Grad Studies Pro	70	77	86	83	95	84	70	70
298 SUNY - Health Sci Ctr at Syracuse	44	36	42	52	51	58	50	68
299 CUNY Herbert H. Lehman College	56	54	113	73	75	75	72	61
300 University of Arkansas - Med Sci Campus	62	58	64	65	56	52	49	61
Total, 1st 300 insts.	218,935	224,512	228,236	231,288	235,714	240,457	244,834	255,209

See explanatory information, if any, and SOURCE(S) at end of table.

294

**Table F-12. Graduate science students in doctorate-granting institutions,  
ranked by 1991 total graduate science students: 1984-91**

Page 6 of 6

Institutional ranking	1984	1985	1986	1987	1988	1989	1990	1991
301 University of Nebraska Medical Center	79	67	59	69	63	72	67	60
302 Rand Graduate School of Policy Studies	57	60	62	70	80	60	48	60
303 University of the Pacific	52	55	53	48	53	51	42	54
304 Meharry Medical College	37	31	27	25	27	35	47	54
305 Union College(NY)	63	119	203	112	92	72	65	40
306 Alfred University	28	28	39	40	30	25	36	35
307 Mercer University	0	0	0	16	28	29	16	30
308 Philadelphia Coll of Pharmacy and Sci	22	31	31	31	25	24	31	29
309 Mass College of Pharmacy/Allied Health	38	42	42	9	15	17	25	24
310 Ponce School of Medicine	0	0	0	0	21	22	19	15
Total, 1st 310 Insts.	219,309	224,945	228,752	231,708	236,128	240,864	245,230	255,610
311 University of New England	0	0	0	0	0	0	13	9
312 Smith College	4	4	4	4	5	6	5	6
313 Baylor College of Dentistry	6	5	4	4	2	0	3	6
314 Desert Research Institute	0	0	0	0	0	0	0	0
315 University of Massachusetts at Amherst	0	0	0	0	0	0	0	0
316 SUNY State College of Optometry	0	0	0	0	0	0	0	0
317 Texas College of Osteopathic Medicine	0	0	0	0	0	0	0	0
318 Rosemead Graduate School of Psychology	0	0	0	0	0	0	0	0
319 Xavier University	0	0	0	0	0	0	0	0
320 George Peabody College for Teachers	0	0	0	0	0	0	0	0
Total, 1st 320 Insts.	219,319	224,954	228,760	231,716	236,135	240,870	245,251	255,631
321 University of New Orleans	0	0	0	0	0	0	0	0
322 Univ of Texas MD Anderson Cancer Center	0	0	0	0	0	0	0	0
323 University of Massachusetts at Worcest	0	0	0	0	0	0	0	0
324 Woods Hole Oceanographic Institution	88	89	100	93	85	0	0	0
325 Emerson College	0	0	0	0	0	0	0	0
326 Chicago Coll of Osteo Medicine	0	0	0	0	0	0	0	0
327 Providence College	0	0	0	0	0	0	0	0
328 Univ of Illinois Med Center - Chicago	0	0	0	0	0	0	0	0
329 University of Dallas	0	0	0	0	0	0	0	0
330 Heed University	0	0	0	0	0	0	0	0
Total, 1st 330 Insts.	219,407	225,043	228,860	231,809	236,220	240,870	245,251	255,631
331 Oral Roberts University	16	15	10	5	6	13	0	0
332 Phila College of Osteopathic Medicine	0	0	0	0	0	0	0	0
333 University of Oklahoma - Norman	0	0	0	0	0	0	0	0
334 NE Ohio Univ Med School	0	0	0	0	0	0	0	0
335 Univ of Health Sciences (Kansas City)	0	0	0	0	0	0	0	0
336 Kirksville College of Osteopathic Med	3	3	4	0	0	0	0	0
337 Institute of Textile Technology	0	0	0	0	0	0	0	0
338 Coll of Osteopathic Med of the Pacific	0	0	0	0	0	0	0	0
339 Univ. of Osteopathic Med & Health Sci	0	0	0	0	0	0	0	0
340 Catholic University of Puerto Rico	0	0	0	0	0	0	0	0
Total, 1st 340 insts.	219,426	225,061	228,874	231,814	236,226	240,883	245,251	255,631
341 Institute of Paper Science & Technology	0	0	0	0	0	0	0	0
342 Atlanta University	411	436	425	406	389	0	0	0
343 West Virginia Sch of Osteopathic Med	0	0	0	0	0	0	0	0
344 Morehouse School of Medicine	0	0	0	0	0	0	0	0
345 University of Oklahoma Health Sci Cente	0	0	0	0	0	0	0	0
346 Medical College of Ohio at Toledo	0	0	0	0	0	0	0	0
347 Oklahoma Coll of Osteo Med & Surgery	0	0	0	0	0	0	0	0
348 Charles R. Drew Univ of Medicine & Sci	0	0	0	0	0	0	0	0
Total, 1st 348 insts.	219,637	225,497	229,299	232,220	236,615	240,883	245,251	255,631

NOTE: Includes medical schools

SCURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table F-13. Graduate engineering students in doctorate-granting institutions, ranked by 1991 total graduate engineering students: 1984-91**

Page 1 of 6

Institutional ranking	1984	1985	1986	1987	1988	1989	1990	1991
Total, all institutions	86,236	89,431	94,841	96,214	96,123	96,382	98,355	105,092
1 University of Southern California	3,996	5,011	4,991	4,710	4,056	3,217	2,717	2,727
2 Georgia Institute of Technology	1,727	1,851	1,873	1,950	1,979	2,062	2,235	2,464
3 University of Michigan	1,720	1,818	2,053	2,177	2,199	2,272	2,387	2,461
4 Stanford University	2,320	2,175	2,223	2,288	2,241	2,173	2,277	2,330
5 Massachusetts Institute of Technology	2,415	2,219	2,248	2,117	2,113	2,164	2,227	2,272
6 Univ of Texas at Austin	1,386	1,515	1,556	1,730	1,771	1,789	1,848	2,021
7 Pennsylvania State University	1,099	1,251	1,528	1,588	1,644	1,762	1,807	1,796
8 Purdue University	1,298	1,372	1,450	1,585	1,608	1,622	1,556	1,672
9 Texas A & M University	1,047	1,051	1,115	1,206	1,347	1,454	1,595	1,631
10 University of Calif at Berkeley	1,911	1,682	1,755	1,746	1,616	1,639	1,655	1,570
Total, 1st 10 Insts.	18,919	19,745	20,792	21,097	20,574	20,134	20,104	20,964
11 George Washington University	2,459	2,659	3,027	2,144	1,620	1,558	1,583	1,569
12 Virginia Polytechnic Inst and State Uni	1,303	1,771	1,783	1,673	1,499	1,555	1,530	1,519
13 University of Illinois at Urbana	1,262	1,305	1,435	1,388	1,414	1,405	1,448	1,440
14 Arizona State University	880	971	1,026	1,141	1,158	1,293	1,311	1,392
15 Rensselaer Polytechnic Institute	1,171	1,112	1,208	1,206	1,082	1,198	1,213	1,373
16 University of Colorado	703	768	849	1,017	1,086	1,092	1,176	1,343
17 University of Houston-University Park	487	569	693	694	872	785	934	1,321
18 University of Maryland - College Park	856	962	1,074	1,149	1,210	1,293	1,276	1,314
19 University of Florida	837	949	981	967	978	1,005	1,104	1,252
20 Ohio State University	1,120	1,153	1,200	1,226	1,230	1,154	1,191	1,237
Total, 1st 20 Insts.	29,997	31,964	34,068	33,702	32,523	32,472	32,850	34,724
21 University of Minnesota	956	1,031	1,128	1,170	1,190	1,219	1,220	1,236
22 University of Wisconsin - Madison	963	1,001	1,026	1,003	1,044	1,095	1,154	1,228
23 North Carolina State Univ at Raleigh	977	1,021	1,255	1,177	1,231	1,215	1,311	1,223
24 Northeastern University	1,716	1,552	1,506	1,357	1,261	1,080	1,106	1,155
25 University of Washington	963	1,025	995	980	1,034	995	1,099	1,136
26 University of Cincinnati	741	776	904	849	892	870	987	1,116
27 New Jersey Institute of Technology	1,137	1,404	1,299	1,492	1,541	1,598	1,338	1,086
28 Wayne State University	640	596	681	683	650	985	1,111	1,086
29 Polytechnic University	682	1,056	1,430	1,221	1,204	1,230	1,143	1,086
30 University of Tennessee at Knoxville	694	759	831	788	823	881	991	1,009
Total, 1st 30 Insts.	39,646	42,185	45,123	44,422	43,393	43,640	44,310	46,087
31 SUNY - Buffalo	646	710	766	801	828	932	929	1,003
32 Drexel University	771	869	914	887	850	825	920	993
33 University of Massachusetts Lowell	795	807	921	1,045	967	711	992	958
34 Univ of Texas at Arlington	660	729	835	851	879	922	853	947
35 University of Illinois at Chicago	789	769	845	820	788	867	889	943
36 University of Missouri - Rolla	759	808	897	951	934	921	907	934
37 Cornell University	804	850	1,002	933	960	948	924	926
38 Iowa State University of Sci & Tech	565	632	677	722	747	737	784	849
39 University of Pittsburgh	1,078	936	851	880	763	788	799	816
40 Clemson University	519	532	593	605	643	634	680	802
Total, 1st 40 Insts.	47,032	49,827	53,424	52,917	51,752	51,925	52,987	55,258
41 US Naval Postgraduate School	524	729	662	583	758	743	747	799
42 Rutgers the State University	671	700	842	900	783	822	803	795
43 Syracuse University	1,108	794	862	861	938	819	733	791
44 University of Calif at Los Angeles	629	697	649	758	788	769	785	783
45 Louisiana State University System	597	516	534	543	585	564	680	788
46 University of Arizona	765	800	861	917	848	795	759	753
47 Columbia University Main Division	879	861	869	836	753	807	747	743
48 University of Oklahoma	677	687	707	871	706	726	739	705
49 Illinois Institute of Technology	841	873	662	670	717	661	644	701
50 University of South Florida	185	217	272	277	497	617	644	670
Total, 1st 50 Insts.	53,908	56,701	60,364	60,133	59,125	59,248	60,268	62,766
51 University of Arkansas	295	283	291	326	324	265	302	669
52 University of Massachusetts	543	564	588	585	692	688	679	667
53 University of Dayton	306	420	590	672	598	588	578	667
54 Case Western Reserve University	615	591	551	675	638	703	690	643
55 Santa Clara University	667	1,010	1,073	1,072	1,078	910	770	638
56 The University of Alabama in Huntsville	241	275	286	358	400	484	528	636
57 Lehigh University	464	490	517	429	451	489	446	634
58 Northwestern University	635	535	520	551	576	615	630	633
59 University of Virginia	487	517	549	573	555	510	618	632
60 University of Pennsylvania	573	586	619	585	559	600	597	632
Total, 1st 60 Insts.	58,934	61,972	65,948	65,959	64,996	65,100	66,106	69,217

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-13. Graduate engineering students in doctorate-granting institutions, ranked by 1991 total graduate engineering students: 1984-91**

Page 2 of 6

Institutional ranking	1984	1985	1986	1987	1988	1989	1990	1991
61 Worcester Polytechnic Institute	379	426	476	368	493	464	513	609
62 Oklahoma State University	455	452	531	568	565	551	568	608
63 University of Calif at Davis	527	527	547	569	560	569	597	606
64 University of Central Florida	462	487	576	535	403	435	559	606
65 Carnegie-Mellon University	597	596	644	605	601	601	623	602
66 CUNY City College	416	366	441	508	503	332	375	591
67 Auburn University	263	316	389	431	463	469	536	590
68 Boston University	258	317	434	440	500	559	617	586
69 Stevens Institute of Technology	1,031	578	323	714	752	701	629	579
70 University of Utah	527	519	546	529	425	444	405	561
Total, 1st 70 insts.	63,849	66,558	70,855	71,226	70,261	70,245	71,528	75,155
71 University of Missouri - Columbia	499	498	529	489	442	493	512	526
72 Michigan State University	381	369	443	451	473	502	485	520
73 Southern Methodist University	482	422	401	526	630	481	449	505
74 University of Kansas	398	430	360	361	382	398	439	501
75 Oregon State University	448	400	435	424	410	436	407	497
76 University of Akron	341	377	424	435	492	470	323	435
77 University of Connecticut	457	489	419	458	474	481	534	492
78 University of Nebraska - Lincoln	309	325	321	306	306	331	392	484
79 University of New Mexico	393	413	427	456	409	450	465	482
80 Washington University	363	339	370	445	484	521	569	481
Total, 1st 80 insts.	67,920	70,618	74,984	75,577	74,763	74,808	76,103	80,138
81 University of Calif at Santa Barbara	385	356	384	390	385	418	450	474
82 University of Louisville	438	397	407	423	458	467	468	467
83 University of Iowa	398	400	433	394	429	418	440	442
84 Colorado State University	364	374	380	368	392	413	392	440
85 SUNY - Binghamton	367	406	380	353	386	406	426	439
86 Air Force Institute of Technology	550	379	360	437	470	450	522	434
87 California Institute of Technology	431	417	388	379	408	430	419	427
88 Old Dominion University	177	209	223	271	289	337	368	426
89 Villanova University	285	264	291	309	358	379	341	417
90 University of Wisconsin - Milwaukee	475	380	395	403	367	382	407	416
Total, 1st 90 insts.	71,790	74,200	78,625	79,304	78,705	78,908	80,338	84,520
91 University of Calif at San Diego	322	347	361	374	305	303	352	412
92 Cleveland State University	335	337	282	342	425	325	390	412
93 West Virginia University	246	258	283	325	354	320	358	407
94 University of Delaware	264	288	322	345	338	302	318	402
95 Marquette University	296	315	344	370	365	369	401	397
96 Princeton University	302	316	337	332	344	359	342	377
97 Oakland University	245	340	325	348	318	329	337	367
98 University of Kentucky	261	266	266	286	288	315	309	363
99 Texas Tech University	253	246	232	235	226	266	280	362
100 University of Calif at Irvine	210	240	273	295	301	299	305	359
Total, 1st 100 insts.	74,524	77,153	81,650	82,556	81,969	82,095	83,728	88,378
101 Florida Atlantic University	187	205	227	234	238	174	306	347
102 Mississippi State University	246	242	248	253	230	268	291	345
103 University of Idaho	171	169	207	259	274	297	333	340
104 University of Rhode Island	238	279	318	380	336	309	262	330
105 University of South Carolina	422	334	312	338	363	372	334	330
106 Florida Institute of Technology	211	259	295	344	337	317	251	319
107 University of Toledo	367	395	329	314	217	286	278	318
108 University of Miami	184	185	199	238	241	222	252	318
109 George Mason University	108	193	175	200	260	273	308	317
110 Utah State University	236	204	276	303	334	359	309	316
Total, 1st 110 insts.	76,894	79,618	84,236	85,419	84,799	84,952	86,652	91,658
111 Tufts University	192	238	218	276	318	321	275	316
112 Wichita State University	200	224	268	354	350	319	311	315
113 Wright State University	106	107	122	181	197	214	243	309
114 The University of Alabama	180	209	192	218	203	234	212	308
115 New Mexico State University	172	171	179	231	237	250	265	300
116 Univ of Texas at El Paso	173	173	185	190	198	221	289	293
117 Michigan Technological University	220	201	236	240	258	263	269	291
118 Kansas State University	219	209	244	294	285	276	277	289
119 San Diego State University	316	320	346	372	303	346	294	286
120 Western Michigan University	65	67	67	149	177	132	221	281
Total, 1st 120 insts.	78,737	81,536	86,293	87,924	87,325	87,528	89,308	94,646

See explanatory information, if any, and SOURCE(S) at end of table.



**Table F-13. Graduate engineering students in doctorate-granting institutions, ranked by 1991 total graduate engineering students: 1984-91**

Page 3 of 6

Institutional ranking	1984	1985	1986	1987	1988	1989	1990	1991
121 Ohio University	200	203	230	264	269	241	43	277
122 Portland State University	73	106	134	133	184	221	249	275
123 Vanderbilt University	155	166	192	213	241	241	254	268
124 Duke University	156	217	242	213	233	256	274	264
125 Washington State University	252	237	273	321	267	239	262	282
126 Catholic University of America	225	269	244	275	266	247	270	259
127 Rice University	258	244	278	290	249	256	258	243
128 Southern Illinois Univ at Carbondale	99	141	191	198	221	225	219	242
129 Univ of Texas at Dallas	0	0	11	59	76	156	156	240
130 Lamar University	173	118	131	111	101	154	154	239
Total, 1st 130 insts.	80,328	83,237	88,227	90,001	89,432	89,762	91,447	97,215
131 SUNY - Stony Brook	225	251	271	291	310	268	207	231
132 Colorado School of Mines	153	205	256	251	224	205	205	228
133 Brigham Young University	210	235	254	234	228	154	145	226
134 Johns Hopkins University	176	189	168	164	169	174	169	220
135 University of Notre Dame	190	173	157	192	213	202	211	220
136 University of Hawaii at Manoa	132	147	152	143	151	190	210	216
137 University of Maryland - Baltimore Cnty	1	7	37	36	82	143	171	212
138 Louisiana Tech. University	189	185	184	161	152	199	154	210
139 University of Rochester	206	193	220	138	225	205	201	200
140 South Dakota State University	85	92	101	101	98	93	105	189
Total, 1st 140 insts.	81,895	84,914	90,027	91,712	91,284	91,595	93,225	99,377
141 Clarkson University	251	256	257	219	224	209	224	199
142 Harvard University	598	611	614	163	189	174	184	197
143 South Dakota School of Mines and Tech	132	129	134	159	147	188	130	196
144 University of Nevada at Reno	114	123	77	83	98	112	181	192
145 New York Institute of Technology	69	81	139	126	125	80	161	185
146 Northern Illinois University	0	0	0	26	43	51	133	179
147 University of Wyoming	148	143	126	141	117	125	126	177
148 University of New Hampshire	104	91	117	117	123	125	144	174
149 Yale University	147	176	176	175	183	121	177	174
150 Tennessee Technological University	126	126	149	163	155	153	149	170
Total, 1st 150 insts.	83,584	86,650	91,816	93,084	92,688	92,933	94,834	101,220
151 The University of Alabama at Birmingham	76	90	118	121	132	153	165	168
152 University of Puerto Rico	85	102	110	117	121	108	109	188
153 Memphis State University	173	182	168	152	146	157	169	165
154 University of Detroit	152	141	125	144	130	143	141	164
155 Florida International University	0	0	0	0	138	197	143	162
156 University of Maine	69	59	64	83	88	134	128	157
157 Florida State University	0	0	0	31	31	72	145	157
158 Tulane University of Louisiana	49	87	72	80	57	46	127	154
159 CUNY Graduate School and Univ Center	133	106	111	117	189	157	134	138
160 North Dakota State University	100	84	105	98	95	117	108	119
Total, 1st 160 insts.	84,421	87,501	92,689	94,027	93,815	94,217	96,203	102,772
161 Brown University	89	97	100	112	97	104	104	117
162 University of Vermont & St Agric Colleg	68	159	131	126	124	116	114	114
163 Dartmouth College	75	83	89	94	120	117	104	113
164 University of Alaska at Fairbanks	96	86	81	106	95	94	102	109
165 University of Southwestern Louisiana	139	130	116	105	93	100	108	109
166 University of Tulsa	123	125	107	143	133	102	112	106
167 University of Mississippi	86	90	81	82	90	86	89	103
168 Antioch University	0	0	0	0	63	63	42	93
169 Fairleigh Dickinson University	229	237	225	198	184	125	96	92
170 Montana State University	106	116	87	101	122	94	80	91
Total, 1st 170 insts.	85,432	88,624	93,706	95,094	94,936	95,218	97,154	103,819
171 Howard University	139	114	113	126	110	105	102	90
172 SUNY - Coll of Env Science and Forestry	58	59	80	72	35	89	87	89
173 Temple University	0	0	0	34	47	62	78	89
174 Union College(NY)	114	112	97	80	59	47	70	86
175 Mercer University	0	0	0	91	107	112	68	83
176 Alfred University	104	94	145	121	94	118	103	80
177 University of South Alabama	0	0	15	26	34	51	68	71
178 Oregon Grad Inst of Science & Technolog	42	54	65	70	66	48	63	71
179 Institute of Paper Science & Technology	100	99	91	95	69	45	57	70
180 New Mexico Institute of Mining and Tech	47	62	64	62	61	56	58	69
Total, 1st 180 insts.	86,036	89,218	94,376	95,871	95,668	95,951	97,908	104,617

See explanatory information, if any, and SOURCE(S) at end of table.

**BEST COPY AVAILABLE**



**Table F-13. Graduate engineering students in doctorate-granting institutions,  
ranked by 1991 total graduate engineering students: 1984-91**

Page 4 of 6

Institutional ranking	1984	1985	1986	1987	1988	1989	1990	1991
181 Indiana University	18	19	39	35	63	23	41	45
182 University of Calif at Santa Cruz	0	0	0	0	0	28	39	44
183 Florida A & M University	15	16	15	16	28	28	24	43
184 Univ of North Carolina at Chapel Hill	36	33	32	41	39	44	37	41
185 University of North Dakota	34	38	38	39	33	35	29	37
186 Indiana State University	0	14	15	25	32	23	28	35
187 University of North Texas	11	5	8	20	24	22	26	34
188 Idaho State University	7	10	13	21	21	36	73	31
189 Institute of Textile Technology	16	16	28	31	35	30	30	30
190 Univ of Texas SW Medical Ctr at Dallas	11	7	15	13	17	18	25	25
Total, 1st 190 insts.	86,184	89,376	94,579	96,112	95,960	96,238	98,260	104,982
191 University of Calif at San Francisco	4	9	19	26	27	30	27	23
192 Virginia Commonwealth University	0	0	167	16	17	23	28	16
193 College of William and Mary	2	1	1	1	0	0	6	16
194 Miami University	17	14	15	18	14	14	14	15
195 University of Georgia	10	8	15	9	11	9	8	13
196 St. Louis University	0	0	0	0	0	0	0	10
197 University of Denver	0	0	0	0	0	0	8	8
198 University of the Pacific	0	0	2	5	10	8	4	5
199 Union Institute	1	0	0	0	0	0	0	4
200 University of South Dakota	0	0	0	0	0	0	0	0
Total, 1st 200 insts.	86,218	89,408	94,798	96,187	96,039	96,322	98,355	105,092
201 East Tennessee State University	0	0	0	0	0	0	0	0
202 George Peabody College for Teachers	0	0	0	0	0	0	0	0
203 Meharry Medical College	0	0	0	0	0	0	0	0
204 Illinois State University	0	0	0	0	0	0	0	0
205 Seton Hall University	0	0	0	0	0	0	0	0
206 Medical College of Georgia	0	0	0	0	0	0	0	0
207 Spalding University	0	0	0	0	0	0	0	0
208 East Texas State University	0	0	0	0	0	0	0	0
209 Univ of Med and Dent of New Jersey	0	0	0	0	0	0	0	0
210 Philadelphia Coll of Pharmacy and Sci	0	0	0	0	0	0	0	0
Total, 1st 210 insts.	86,218	89,408	94,798	96,187	96,039	96,322	98,355	105,092
211 Loyola University of Chicago	0	0	0	0	0	0	0	0
212 Sam Houston State University	0	0	0	0	0	0	0	0
213 Hahnemann University	0	0	0	0	0	0	0	0
214 Adelphi University	0	0	0	0	0	0	0	0
215 Emory University	0	0	0	0	0	0	0	0
216 Texas Christian University	0	0	0	0	0	0	0	0
217 Providence College	0	0	0	0	0	0	0	0
218 Medical University of South Carolina	0	0	0	0	0	0	0	0
219 University of Montana	0	0	0	0	0	0	0	0
220 Hofstra University	0	0	0	0	0	0	0	0
Total, 1st 220 insts.	86,218	89,408	94,798	96,187	96,039	96,322	98,355	105,092
221 Atlanta University	0	0	0	0	0	0	0	0
222 Univ of Texas MD Anderson Cancer Center	0	0	0	0	0	0	0	0
223 University of New Orleans	0	0	0	0	0	0	0	0
224 University of Oklahoma - Norman	0	0	0	0	0	0	0	0
225 The Medical College of Pennsylvania	0	0	0	0	0	0	0	0
226 University of Missouri - St Louis	0	0	0	0	0	0	0	0
227 Nova University	0	0	0	0	0	0	0	0
228 University of Missouri - Kansas City	0	0	0	0	0	0	0	0
229 New School for Social Research	0	0	0	0	0	0	0	0
230 Phila College of Osteopathic Medicine	0	0	0	0	0	0	0	0
Total, 1st 230 insts.	86,218	89,408	94,798	96,187	96,039	96,322	98,355	105,092
231 Fordham University	0	0	0	0	0	0	0	0
232 Georgia State University	0	0	0	0	0	0	0	0
233 Stephen F. Austin State University	0	0	0	0	0	0	0	0
234 Texas Woman's University	0	0	18	0	0	0	0	0
235 De Paul University	0	0	0	0	0	0	0	0
236 Kirksville College of Osteopathic Med	0	0	0	0	0	0	0	0
237 CUNY Hunter College	0	0	0	0	0	0	0	0
238 Marshall University	0	0	0	0	0	0	0	0
239 University of Southern Mississippi	0	0	0	0	0	0	0	0
240 Chicago Coll of Osteo Medicine	0	0	0	0	0	0	0	0
Total, 1st 240 insts.	86,218	89,408	94,816	96,187	96,039	96,322	98,355	105,092

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-13. Graduate engineering students in doctorate-granting institutions, ranked by 1991 total graduate engineering students: 1984-91**

Page 5 of 6

Institutional ranking	1984	1985	1986	1987	1988	1989	1990	1991
241 University of Chicago	0	0	0	0	0	0	0	0
242 Creighton University	0	0	0	0	0	0	0	0
243 Univ of Texas Hlth Sci Ctr San Antonio	0	0	0	0	0	0	0	0
244 Catholic University of Puerto Rico	0	0	0	0	0	0	0	0
245 New York Medical College	0	0	0	0	0	0	0	0
246 University of Puerto Rico Med Sci Campus	0	0	0	0	0	0	0	0
247 Xavier University	0	0	0	0	0	0	0	0
248 Yeshiva University	0	0	0	0	0	0	0	0
249 University of Health Sciences (Chicago)	0	0	0	0	0	0	0	0
250 Oral Roberts University	0	0	0	0	0	0	0	0
Total, 1st 250 Insts.	86,218	89,408	94,816	96,187	96,039	96,322	98,355	105,092
251 New York University	0	0	0	0	0	0	0	0
252 Oregon Health Sciences University	0	0	0	0	0	0	0	0
253 Baylor College of Dentistry	0	0	0	0	0	0	0	0
254 Baylor College of Medicine	0	0	0	0	0	0	0	0
255 Univ of Texas Med Branch at Galveston	0	0	0	0	0	0	0	0
256 Bryn Mawr College	0	0	0	0	0	0	0	0
257 University of Northern Iowa	0	0	0	0	0	0	0	0
258 University of Tennessee, Memphis	0	0	0	0	0	0	0	0
259 University of Nebraska Medical Center	0	0	0	0	0	0	0	0
260 Baylor University	0	0	0	0	0	0	0	0
Total, 1st 260 Insts.	86,218	89,408	94,816	96,187	96,039	96,322	98,355	105,092
261 Thomas Jefferson University	0	0	0	0	0	0	0	0
262 CUNY Mt. Sinai Sch of Medicine	0	0	0	0	0	0	0	0
263 University of Puerto Rico - Rio Piedras	0	0	0	0	0	0	0	0
264 Medical College of Ohio at Toledo	0	0	0	0	0	0	0	0
265 Medical College of Wisconsin	0	0	0	0	0	0	0	0
266 The American University	0	0	0	0	0	0	0	0
267 Central Michigan University	0	0	0	0	0	0	0	0
268 Andrews University	0	0	0	0	0	0	0	0
269 Wesleyan University	0	0	0	0	0	0	0	0
270 Albany Medical College Grad Studies Pro	0	0	0	0	0	0	0	0
Total, 1st 270 Insts.	86,218	89,408	94,816	96,187	96,039	96,322	98,355	105,092
271 University of Oregon	0	0	0	0	0	0	0	0
272 Univ of North Carolina at Greensboro	0	0	0	0	0	0	0	0
273 University of New England	0	0	0	0	0	0	0	0
274 University of Northern Colorado	0	0	0	0	0	0	0	0
275 Woods Hole Oceanographic Institution	18	23	25	27	28	0	0	0
276 Wake Forest University	0	0	0	0	0	0	0	0
277 SUNY - Health Sci Ctr at Syracuse	0	0	0	0	0	0	0	0
278 Northeast Louisiana University	0	0	0	0	0	0	0	0
279 SUNY - Health Sci Ctr at Brooklyn	0	0	0	0	0	0	0	0
280 Univ. of Osteopathic Med & Health Sci	0	0	0	0	0	0	0	0
Total, 1st 280 Insts.	86,236	89,431	94,841	96,214	96,067	96,322	98,355	105,092
281 University of Massachusetts at Amherst	0	0	0	0	0	0	0	0
282 Duquesne University	0	0	0	0	0	0	0	0
283 Long Island University	0	0	0	0	56	60	0	0
284 Smith College	0	0	0	0	0	0	0	0
285 Pace University	0	0	0	0	0	0	0	0
286 University of Calif at Riverside	0	0	0	0	0	0	0	0
287 Univ of Health Sciences (Kansas City)	0	0	0	0	0	0	0	0
288 Ball State University	0	0	0	0	0	0	0	0
289 Bowling Green State University	0	0	0	0	0	0	0	0
290 Kent State University	0	0	0	0	0	0	0	0
Total, 1st 290 Insts.	86,236	89,431	94,841	96,214	96,123	96,382	98,355	105,092
291 Georgetown University	0	0	0	0	0	0	0	0
292 SUNY - Albany	0	0	0	0	0	0	0	0
293 Mass College of Pharmacy/Allied Health	0	0	0	0	0	0	0	0
294 Loma Linda University	0	0	0	0	0	0	0	0
295 Golden Gate University	0	0	0	0	0	0	0	0
296 Fuller Theological Seminary	0	0	0	0	0	0	0	0
297 Indiana University of Pennsylvania	0	0	0	0	0	0	0	0
298 Claremont Univ Center & Graduate School	0	0	0	0	0	0	0	0
299 US International University	0	0	0	0	0	0	0	0
300 University of Maryland - Balt Prof Sch	0	0	0	0	0	0	0	0
Total, 1st 300 Insts.	86,236	89,431	94,841	96,214	96,123	96,382	98,355	105,092

See explanatory information, if any, and SOURCE(S) at end of table.

300

**Table F-13. Graduate engineering students in doctorate-granting institutions,  
ranked by 1991 total graduate engineering students: 1984-91**

Page 6 of 6

Institutional ranking	1984	1985	1986	1987	1988	1989	1990	1991
301 East Carolina University	0	0	0	0	0	0	0	0
302 The Wright Institute	0	0	0	0	0	0	0	0
303 Columbia University Teachers College	0	0	0	0	0	0	0	0
304 Desert Research Institute	0	0	0	0	0	0	0	0
305 Emerson College	0	0	0	0	0	0	0	0
306 Clark University	0	0	0	0	0	0	0	0
307 St John's University	0	0	0	0	0	0	0	0
308 Biola University	0	0	0	0	0	0	0	0
309 Brandeis University	0	0	0	0	0	0	0	0
310 Rockefeller University	0	0	0	0	0	0	0	0
Total, 1st 310 insts.	86,236	89,431	94,841	96,214	96,123	96,382	98,355	105,092
311 Boston College	0	0	0	0	0	0	0	0
312 University of Massachusetts at Worcester	0	0	0	0	0	0	0	0
313 Texas College of Osteopathic Medicine	0	0	0	0	0	0	0	0
314 Rush University	0	0	0	0	0	0	0	0
315 Calif Sch of Prof Psych-Berkeley/Alamed	0	0	0	0	0	0	0	0
316 SUNY State College of Optometry	0	0	0	0	0	0	0	0
317 Calif Sch of Prof Psych - Los Angeles	0	0	0	0	0	0	0	0
318 Rosemead Graduate School of Psychology	0	0	0	0	0	0	0	0
319 Mayo Graduate School	0	0	0	0	0	0	0	0
320 Eastern Virginia Medical School	0	0	0	0	0	0	0	0
Total, 1st 320 insts.	86,236	89,431	94,841	96,214	96,123	96,382	98,355	105,092
321 Rand Graduate School of Policy Studies	0	0	0	0	0	0	0	0
322 University of Oklahoma Health Sci Cntr	0	0	0	0	0	0	0	0
323 Mahanishi International University	0	0	0	0	0	0	0	0
324 Calif Sch of Prof Psych - San Diego	0	0	0	0	0	0	0	0
325 West Virginia Sch of Osteopathic Med	0	0	0	0	0	0	0	0
326 Oklahoma Coll of Osteo Med & Surgery	0	0	0	0	0	0	0	0
327 Univ of Texas Hlth Sci Ctr at Houston	0	0	0	0	0	0	0	0
328 Calif Sch of Prof Psych - Fresno	0	0	0	0	0	0	0	0
329 California Institute of Integral Studie	0	0	0	0	0	0	0	0
330 Heed University	0	0	0	0	0	0	0	0
Total, 1st 330 insts.	86,236	89,431	94,841	96,214	96,123	96,382	98,355	105,092
331 University of Maryland Eastern Shore	0	0	0	0	0	0	0	0
332 University of Arkansas - Med Sci Campus	0	0	0	0	0	0	0	0
333 Northern Arizona University	0	0	0	0	0	0	0	0
334 NE Ohio Univ Med School	0	0	0	0	0	0	0	0
335 Caribbean Center for Advanced Studies	0	0	0	0	0	0	0	0
336 The Fielding Institute	0	0	0	0	0	0	0	0
337 CUNY Herbert H. Lehman College	0	0	0	0	0	0	0	0
338 Coll of Osteopathic Med of the Pacific	0	0	0	0	0	0	0	0
339 Uniformed Serv Univ of the Hlth Science	0	0	0	0	0	0	0	0
340 Pacific Grad School of Prof Psych	0	0	0	0	0	0	0	0
Total, 1st 340 insts.	86,236	89,431	94,841	96,214	96,123	96,382	98,355	105,092
341 Chicago School of Prof Psych	0	0	0	0	0	0	0	0
342 Forest Institute of Prof Psych	0	0	0	0	0	0	0	0
343 Ponce School of Medicine	0	0	0	0	0	0	0	0
344 Morehouse School of Medicine	0	0	0	0	0	0	0	0
345 Univ of Illinois Med Center - Chicago	0	0	0	0	0	0	0	0
346 University of Dallas	0	0	0	0	0	0	0	0
347 Clark Atlanta University	0	0	0	0	0	0	0	0
348 Charles R. Drew Univ of Medicine & Sci	0	0	0	0	0	0	0	0
Total, 1st 348 insts.	86,236	89,431	94,841	96,214	96,123	96,382	98,355	105,092

NOTE: Includes medical schools

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table F-14. Graduate students in health fields in doctorate-granting institutions, ranked by 1991 total graduate students in health fields: 1984-91**

Page 1 of 6

Institutional ranking	1984	1985	1986	1987	1988	1989	1990	1991
Total, all institutions	38,582	38,768	40,094	39,924	41,171	42,256	41,305	50,573
1 University of Pittsburgh	1,231	1,165	1,215	1,298	1,278	1,164	1,156	1,195
2 Texas Woman's University	1,317	1,296	1,306	1,269	1,295	1,430	1,219	1,099
3 University of Illinois at Chicago	582	568	627	615	737	768	787	968
4 University of Calif at Los Angeles	929	974	974	985	1,009	1,062	717	960
5 Univ of North Carolina at Chapel Hill	644	631	700	799	647	711	711	921
6 Ohio State University	609	687	732	772	577	607	801	850
7 University of South Florida	175	279	340	296	366	249	514	808
8 University of Calif at San Francisco	598	605	667	714	751	750	697	736
9 University of Maryland - Balt Prof Sch	542	497	541	525	539	604	635	714
10 Indiana University	687	82	681	716	686	902	747	711
Total, 1st 10 insts.	7,324	8,784	7,783	7,989	7,885	8,247	7,984	8,962
11 Virginia Commonwealth University	316	329	343	458	442	535	605	709
12 The University of Alabama at Birmingham	496	546	613	736	790	803	402	687
13 University of Oklahoma	453	451	346	446	796	453	616	681
14 University of Colorado	295	183	446	489	424	178	247	659
15 University of Wisconsin - Madison	518	484	464	582	600	604	370	655
16 Columbia University Teachers College	557	593	635	557	605	553	625	647
17 San Diego State University	339	427	441	455	486	437	553	637
18 Johns Hopkins University	401	449	460	489	515	547	589	631
19 University of Iowa	449	484	490	514	519	506	580	625
20 University of Puerto Rico Med Sci Campu	368	384	353	331	498	520	447	611
Total, 1st 20 insts.	11,516	11,114	12,374	13,026	13,340	13,383	13,018	15,504
21 Wayne State University	502	520	185	178	193	499	563	560
22 University of Washington	596	574	568	586	588	555	553	578
23 SUNY - Buffalo	573	507	476	495	542	554	289	567
24 Columbia University Main Division	517	526	530	444	459	465	507	551
25 Long Island University	1,000	736	846	746	765	622	745	541
26 Univ of Texas Hlth Sci Ctr at Houston	375	368	386	387	405	468	519	534
27 University of Minnesota	829	824	568	461	476	504	508	530
28 University of Florida	404	418	418	153	147	159	536	517
29 University of Connecticut	355	352	456	441	447	458	322	511
30 University of Massachusetts	329	394	335	332	392	447	344	508
Total, 1st 30 insts.	16,996	16,333	17,142	17,249	17,754	18,114	17,904	20,921
31 University of Kansas	390	359	412	422	455	455	476	484
32 Tulane University of Louisiana	392	392	393	388	426	414	373	481
33 University of Cincinnati	497	408	457	466	465	482	287	478
34 St. Louis University	399	379	379	381	417	230	232	475
35 Northeastern University	305	284	271	262	250	369	248	465
36 University of Calif at Berkeley	478	493	446	454	475	479	487	463
37 University of Michigan	428	452	405	448	408	504	498	482
38 Emory University	323	286	298	304	351	386	418	437
39 Harvard University	309	299	301	373	376	344	392	427
40 University of South Carolina	270	325	432	487	375	405	421	426
Total, 1st 40 insts.	20,787	20,010	20,936	21,234	21,752	22,182	21,736	25,519
41 Adelphi University	574	547	533	112	100	111	541	418
42 New York University	769	657	436	375	333	61	64	415
43 Univ of Texas at Austin	378	63	56	232	232	232	411	412
44 West Virginia University	230	198	180	301	324	374	368	409
45 Boston University	706	792	692	638	383	398	278	408
46 Temple University	151	135	131	177	157	250	297	403
47 University of Southern California	202	235	239	248	299	410	413	398
48 Rush University	258	265	268	304	341	395	376	387
49 Rutgers the State University	251	105	220	199	220	80	296	364
50 University of Utah	325	346	387	335	333	333	349	372
Total, 1st 50 insts.	24,631	23,353	24,128	24,155	24,474	24,826	25,129	29,525
51 University of Hawaii at Manoa	269	283	315	302	315	332	355	369
52 University of Tennessee at Knoxville	179	198	216	168	154	284	173	368
53 Univ of Texas Hlth Sci Ctr San Antonio	200	194	205	205	208	303	18	367
54 Loma Linda University	379	507	417	328	374	353	367	383
55 CUNY Hunter College	410	430	433	402	383	141	182	350
56 George Washington University	35	35	36	39	298	280	287	337
57 University of Kentucky	162	176	170	167	103	248	127	329
58 SUNY - Stony Brook	179	180	207	315	369	326	47	314
59 Wichita State University	256	256	252	260	268	266	165	302
60 Purdue University	246	256	280	258	305	289	284	299
Total, 1st 60 insts.	26,946	25,870	26,659	26,599	27,251	27,648	27,134	32,923

See explanatory information, if any, and SOURCE(S) at end of table.

312

**Table F-14. Graduate students in health fields in doctorate-granting institutions, ranked by 1991 total graduate students in health fields: 1984-91**

Page 2 of 6

Institutional ranking	1984	1985	1986	1987	1988	1989	1990	1991
61 University of Akron	183	218	209	212	214	222	280	295
62 Medical College of Ohio at Toledo	42	171	162	214	222	255	167	290
63 Case Western Reserve University	249	305	293	316	16	210	316	289
64 Univ of North Carolina at Greensboro	130	149	148	150	160	165	222	282
65 University of Massachusetts Lowell	98	88	128	13	220	162	218	253
66 Southern Illinois Univ at Carbondale	90	223	268	349	331	311	233	253
67 Kent State University	234	209	208	223	246	236	251	252
68 Wright State University	122	173	176	171	204	229	233	251
69 University of Arizona	248	246	283	274	281	258	251	250
70 St John's University	251	201	308	287	262	262	283	248
Total, 1st 70 Insts.	28,593	27,853	28,840	28,808	29,407	29,958	29,568	35,586
71 University of Rhode Island	88	91	133	137	153	197	82	244
72 Yale University	193	205	214	208	220	240	225	241
73 Arizona State University	202	223	126	34	49	52	245	240
74 University of Missouri - Kansas City	159	183	179	199	175	185	55	238
75 Syracuse University	161	173	140	88	146	176	241	236
76 Univ of Texas Med Branch at Galveston	98	107	125	135	121	129	65	227
77 Pace University	454	441	540	370	240	235	209	226
78 University of Illinois at Urbana	100	107	114	131	124	120	131	222
79 Univ of Texas at Arlington	165	216	200	179	192	200	0	222
80 Colorado State University	141	139	160	164	183	196	221	217
Total, 1st 80 Insts.	30,354	29,738	30,771	30,453	31,014	31,688	31,042	37,899
81 Boston College	84	112	122	134	132	174	194	214
82 University of Nebraska Medical Center	176	151	127	138	162	191	210	212
83 Northern Illinois University	231	244	262	220	214	230	234	208
84 Northwestern University	226	198	182	179	210	222	173	207
85 University of Wisconsin - Milwaukee	169	191	202	206	220	210	50	202
86 Georgia State University	85	91	88	83	132	138	0	199
87 Catholic University of America	331	341	297	259	228	207	204	199
88 George Mason University	95	90	116	141	164	177	222	196
89 Marquette University	140	190	206	224	229	215	87	188
90 University of Central Florida	46	79	90	115	116	133	132	185
Total, 1st 90 Insts.	31,937	31,425	32,463	32,152	32,821	33,585	32,548	39,909
91 University of New Mexico	63	87	94	116	133	159	83	185
92 Hahnemann University	26	37	134	113	128	137	166	185
93 University of Northern Colorado	68	112	183	203	111	115	149	185
94 Idaho State University	29	58	59	103	114	92	135	180
95 Duquesne University	35	35	66	92	106	122	153	179
96 Michigan State University	258	248	260	156	157	177	165	177
97 University of South Alabama	113	95	102	126	135	170	183	173
98 University of Missouri - Columbia	118	117	131	158	151	144	33	172
99 Univ of Texas at Dallas	106	94	122	95	111	127	134	169
100 Old Dominion University	101	72	89	102	161	126	161	167
Total, 1st 100 Insts.	32,854	32,380	33,703	33,414	34,128	34,954	33,910	41,681
101 University of Arkansas - Med Sci Campus	136	152	154	157	139	120	148	165
102 University of Houston-University Park	59	62	66	73	70	137	207	164
103 Baylor University	35	54	42	40	42	150	173	160
104 University of Puerto Rico - Rio Piedras	76	120	119	131	113	99	135	158
105 Washington University	11	9	70	85	100	90	137	157
106 Northern Arizona University	43	11	27	27	40	78	136	156
107 Western Michigan University	131	128	119	111	130	128	127	155
108 Florida International University	0	0	0	0	57	126	127	153
109 Andrews University	0	0	0	0	123	130	151	152
110 Pennsylvania State University	151	193	164	167	160	143	116	148
Total, 1st 110 Insts.	33,496	33,109	34,464	34,205	35,102	36,155	35,367	43,249
111 University of Mississippi	153	129	122	91	105	121	119	144
112 Loyola University of Chicago	140	110	114	111	125	128	0	144
113 Seton Hall University	166	181	154	152	162	114	124	144
114 Univ of Texas at El Paso	112	100	89	109	147	118	142	143
115 East Carolina University	118	91	90	89	95	106	114	143
116 Florida State University	114	102	84	72	104	101	102	143
117 University of Southern Mississippi	86	134	136	130	138	143	60	142
118 South Dakota State University	50	89	76	76	78	14	134	139
119 Xavier University	0	0	0	0	0	76	76	135
120 University of Miami	65	90	115	102	122	143	151	134
Total, 1st 120 Insts.	34,500	34,135	35,444	35,137	36,178	37,319	36,389	44,660

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-14. Graduate students in health fields in doctorate-granting institutions, ranked by 1991 total graduate students in health fields: 1984-91**

Page 3 of 6

Institutional ranking	1984	1985	1986	1987	1988	1989	1990	1991
121 Nova University	0	38	72	56	66	74	74	120
122 Medical College of Georgia	101	115	97	119	129	147	23	118
123 Georgetown University	84	108	109	71	62	93	0	117
124 Tufts University	32	34	40	42	66	96	108	117
125 Auburn University	58	63	81	71	73	81	104	112
126 Louisiana State University System	109	127	127	126	104	105	115	110
127 Washington State University	73	115	105	105	102	94	112	110
128 University of North Texas	49	95	86	98	104	88	98	109
129 Hofstra University	0	63	51	57	69	92	98	106
130 University of Wyoming	32	32	31	37	35	52	10	105
Total, 1st 130 Insts.	35,038	34,925	36,243	35,919	36,988	38,241	37,131	45,784
131 Oregon State University	38	24	30	29	35	59	80	102
132 University of Tennessee, Memphis	96	89	104	99	101	101	105	101
133 University of Calif at San Diego	36	40	72	75	93	97	110	98
134 University of the Pacific	40	32	69	88	102	97	98	95
135 Ball State University	89	91	91	124	51	57	72	94
136 Texas Tech University	57	54	47	50	22	21	39	93
137 Texas College of Osteopathic Medicine	35	51	58	60	59	70	79	89
138 Thomas Jefferson University	0	0	0	41	38	47	59	86
139 Stanford University	133	161	39	26	31	31	25	85
140 De Paul University	108	128	117	89	92	112	55	84
Total, 1st 140 Insts.	35,676	35,595	36,870	36,600	37,612	38,933	37,853	46,711
141 Portland State University	16	35	57	62	86	91	86	83
142 North Carolina State Univ at Raleigh	27	33	34	47	49	64	72	80
143 Cornell University	52	61	62	68	72	90	85	77
144 Univ. of Osteopathic Med & Health Sci	0	0	0	0	0	0	68	74
145 Cleveland State University	51	60	55	73	72	71	81	74
146 Duke University	47	48	48	62	67	70	66	74
147 East Tennessee State University	0	0	0	50	44	49	50	73
148 University of Louisville	39	35	29	47	45	59	66	72
149 Emerson College	0	0	0	0	69	74	58	72
150 SUNY - Binghamton	62	74	72	68	74	79	83	72
Total, 1st 150 Insts.	35,964	35,941	37,227	37,077	38,190	39,580	38,568	47,462
151 University of Rochester	95	86	54	71	58	59	71	72
152 Oakland University	13	20	27	31	30	62	52	72
153 Univ of Texas SW Medical Ctr at Dallas	59	59	46	28	43	52	52	71
154 University of Virginia	148	213	216	215	216	83	28	69
155 University of Detroit	13	18	18	17	31	20	35	69
156 Memphis State University	75	73	74	61	59	56	60	68
157 University of Georgia	54	58	68	54	58	54	52	68
158 Clemson University	28	38	43	42	42	49	51	66
159 University of Delaware	73	69	65	64	82	0	0	65
160 Illinois State University	64	58	49	76	85	85	70	65
Total, 1st 160 insts.	36,586	36,633	37,887	37,736	38,894	40,109	39,039	48,147
161 CUNY Graduate School and Univ Center	57	55	60	60	61	73	77	65
162 University of Pennsylvania	26	31	40	47	41	53	61	65
163 University of Maryland - College Park	70	60	59	44	46	66	75	64
164 University of Nevada at Reno	20	14	18	40	50	26	75	64
165 University of New Hampshire	20	54	52	19	19	26	63	63
166 Utah State University	33	32	45	40	45	58	64	61
167 Northeast Louisiana University	35	32	33	31	41	47	61	60
168 Baylor College of Medicine	43	34	39	38	45	53	54	57
169 Marshall University	31	46	45	53	56	53	60	57
170 Lamar University	49	53	47	38	46	45	52	57
Total, 1st 170 insts.	36,970	37,044	38,325	38,146	39,344	40,609	39,681	48,760
171 University of Toledo	19	21	20	24	20	33	32	56
172 SUNY - Albany	0	0	0	0	0	0	35	56
173 Ohio University	34	46	54	46	51	57	0	55
174 Catholic University of Puerto Rico	51	48	46	58	0	0	54	52
175 Univ of Med and Dent of New Jersey	63	60	70	80	77	27	49	52
176 Vanderbilt University	35	51	39	36	38	41	46	51
177 Brigham Young University	57	87	99	96	69	45	31	49
178 Florida A & M University	13	16	15	14	22	23	26	49
179 University of Calif at Santa Barbara	58	51	49	48	56	58	50	48
180 University of Denver	109	96	68	73	76	48	44	47
Total, 1st 180 Insts.	37,409	37,520	38,785	38,621	39,753	40,941	40,048	49,275

See explanatory information, if any, and SOURCE(S) at end of table.

BEST COPY AVAILABLE



**Table F-14. Graduate students in health fields in doctorate-granting institutions, ranked by 1991 total graduate students in health fields: 1984-91**

Page 4 of 6

Institutional ranking	1984	1985	1986	1987	1988	1989	1990	1991
181 University of Southwestern Louisiana	54	35	47	30	33	44	43	45
182 Creighton University	0	51	44	40	33	54	0	45
183 New York Medical College	202	239	220	250	264	176	150	43
184 Virginia Polytechnic Inst and State Uni	0	0	0	16	30	37	35	43
185 Central Michigan University	58	58	59	0	56	47	41	43
186 Baylor College of Dentistry	52	53	42	48	54	57	44	42
187 University of Northern Iowa	26	36	36	25	35	32	39	40
188 University of Vermont & St Agric Colleg	31	28	46	45	48	49	47	39
189 Kansas State University	42	30	26	22	24	31	37	39
190 Florida Atlantic University	0	0	0	0	0	0	47	38
Total, 1st 190 Insts.	37,874	38,050	39,305	39,097	40,330	41,468	40,531	49,692
191 University of Calif at Irvine	8	7	20	27	34	40	38	38
192 Montana State University	17	17	25	27	26	29	7	37
193 University of Nebraska - Lincoln	17	17	15	15	16	24	26	36
194 University of North Dakota	28	28	30	30	32	34	34	35
195 University of South Dakota	31	31	51	43	33	33	39	34
196 Howard University	3	0	0	0	0	0	0	33
197 The University of Alabama in Huntsville	37	44	43	59	52	41	36	33
198 Union Institute	51	44	46	48	48	50	55	33
199 Spalding University	0	0	0	25	29	32	0	33
200 University of New England	0	0	0	0	0	0	16	32
Total, 1st 200 Insts.	38,066	38,238	39,535	39,371	40,600	41,751	40,782	50,036
201 The Medical College of Pennsylvania	0	0	18	19	17	20	28	31
202 Philadelphia Coll of Pharmacy and Sci	14	22	27	24	27	22	30	31
203 Uniformed Serv Univ of the Hlth Science	12	17	19	24	24	34	31	30
204 Miami University	28	31	24	23	29	26	27	27
205 Yeshiva University	21	19	19	21	20	24	25	25
206 CUNY City College	17	10	14	13	17	18	20	22
207 SUNY State College of Optometry	7	15	14	19	33	33	28	22
208 Mass College of Pharmacy/Allied Health	18	23	23	31	32	22	16	22
209 University of Chicago	8	5	4	7	12	9	17	21
210 Texas Christian University	10	11	10	14	15	17	22	19
Total, 1st 210 Insts.	38,201	38,391	39,707	39,566	40,826	41,976	41,026	50,286
211 Oklahoma State University	13	13	12	16	14	5	17	19
212 The University of Alabama	26	18	25	25	10	15	15	19
213 Bowling Green State University	36	27	21	16	27	22	22	18
214 Indiana State University	0	0	12	14	13	0	0	18
215 Louisiana Tech University	13	28	30	12	21	15	17	17
216 SUNY - Health Sci Ctr at Brooklyn	27	25	14	14	10	13	14	17
217 Albany Medical College Grad Studies Pro	0	0	6	10	15	16	16	17
218 North Dakota State University	15	15	8	5	6	7	11	16
219 Mayo Graduate School	14	17	15	17	15	17	14	16
220 Texas A & M University	48	43	49	44	38	38	56	15
Total, 1st 220 Insts.	38,393	38,577	39,899	39,739	40,995	42,124	41,208	50,458
221 Mississippi State University	5	7	10	12	12	11	13	14
222 SUNY - Health Sci Ctr at Syracuse	9	7	5	5	4	2	1	14
223 Union College(NY)	27	20	11	17	24	14	9	14
224 Medical University of South Carolina	0	4	4	5	6	3	18	13
225 Wake Forest University	5	5	4	2	1	0	4	12
226 University of Maryland - Baltimore Cnty	13	16	29	20	12	13	18	11
227 University of Calif at Davis	14	17	18	12	9	13	13	10
228 Iowa State University of Sci & Tech	5	7	4	4	5	6	4	7
229 University of Health Sciences (Chicago)	0	0	0	0	0	4	4	7
230 University of Montana	40	27	41	35	34	21	4	5
Total, 1st 230 Insts.	38,511	38,687	40,025	39,851	41,102	42,211	41,296	50,565
231 Massachusetts Institute of Technology	0	0	0	0	0	2	4	4
232 Mercer University	0	0	0	0	1	3	4	3
233 Oregon Health Sciences University	0	0	0	0	0	0	1	1
234 University of Massachusetts at Amherst	0	0	0	0	0	0	0	0
235 Lehigh University	0	0	0	0	0	0	0	0
236 Stevens Institute of Technology	0	0	0	0	0	0	0	0
237 Clark University	0	0	0	0	0	0	0	0
238 New Mexico Institute of Mining and Tech	0	0	0	0	0	0	0	0
239 Brandeis University	0	0	0	0	0	0	0	0
240 Princeton University	0	0	0	0	0	0	0	0
Total, 1st 240 Insts.	38,511	38,687	40,025	39,851	41,103	42,216	41,305	50,573

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-14. Graduate students in health fields in doctorate-granting institutions,  
ranked by 1991 total graduate students in health fields: 1984-91**

Page 5 of 6

Institutional ranking	1984	1985	1986	1987	1988	1989	1990	1991
241 Woods Hole Oceanographic Institution	0	0	0	0	0	0	0	0
242 Smith College	0	0	0	0	0	0	0	0
243 University of Maine	0	0	0	0	0	0	0	0
244 Phila College of Osteopathic Medicine	8	9	0	0	0	0	0	0
245 University of Puerto Rico	0	0	0	0	0	0	0	0
246 Univ of Texas MD Anderson Cancer Center	0	0	0	0	0	0	0	0
247 Michigan Technological University	0	0	0	0	0	0	0	0
248 Univ of Illinois Med Center - Chicago	0	0	0	0	0	0	0	0
249 Institute of Textile Technology	0	0	0	0	0	0	0	0
250 Oral Roberts University	23	19	17	20	17	20	0	0
Total, 1st 250 insts.	38,542	38,715	40,042	39,871	41,120	42,236	41,305	50,573
251 New Jersey Institute of Technology	0	0	0	0	0	0	0	0
252 University of Maryland Eastern Shore	0	0	0	0	0	0	0	0
253 Worcester Polytechnic Institute	0	0	0	0	0	0	0	0
254 University of Dallas	0	0	0	0	0	0	0	0
255 University of New Orleans	0	0	0	0	0	0	0	0
256 Institute of Paper Science & Technology	0	0	0	0	0	0	0	0
257 SUNY - Coll of Env Science and Forestry	0	0	0	0	0	0	0	0
258 University of Dayton	0	0	0	0	0	0	0	0
259 Alfred University	0	0	0	0	0	0	0	0
260 Stephen F. Austin State University	0	0	0	0	0	0	0	0
Total, 1st 260 insts.	38,542	38,715	40,042	39,871	41,120	42,236	41,305	50,573
261 CUNY Herbert H. Lehman College	0	0	0	0	0	0	0	0
262 CUNY Mt. Sinai Sch of Medicine	0	0	0	0	0	0	0	0
263 Southern Methodist University	0	0	0	0	0	0	0	0
264 Sam Houston State University	0	0	0	0	0	0	0	0
265 Rice University	0	0	0	0	0	0	0	0
266 Univ of Health Sciences (Kansas City)	0	0	0	0	0	0	0	0
267 University of Oklahoma - Norman	0	0	0	0	0	0	0	0
268 East Texas State University	0	0	0	0	0	0	0	0
269 Georgia Institute of Technology	0	0	0	0	0	0	0	0
270 Air Force Institute of Technology	0	0	0	0	0	0	0	0
Total, 1st 270 insts.	38,542	38,715	40,042	39,871	41,120	42,236	41,305	50,573
271 University of Tulsa	0	0	0	0	0	0	0	0
272 Rockefeller University	0	0	0	0	0	0	0	0
273 Illinois Institute of Technology	0	0	0	0	0	0	0	0
274 University of Oklahoma Health Sci Cntr	0	0	0	0	0	0	0	0
275 Chicago Coll of Osleo Medicine	0	0	0	0	0	0	0	0
276 University of Idaho	10	12	12	12	2	0	0	0
277 Rensselaer Polytechnic Institute	0	0	0	0	0	0	0	0
278 Clark Atlanta University	0	0	0	0	0	0	0	0
279 Fairleigh Dickinson University	30	31	32	32	37	20	0	0
280 Atlanta University	0	0	0	0	0	0	0	0
Total, 1st 280 insts.	38,582	38,758	40,086	39,915	41,159	42,256	41,305	50,573
281 New Mexico State University	0	0	0	0	0	0	0	0
282 Kirksville College of Osteopathic Med	0	0	3	0	0	0	0	0
283 Polytechnic University	0	0	0	0	0	0	0	0
284 New York Institute of Technology	0	0	0	0	0	0	0	0
285 Florida Institute of Technology	0	0	0	0	0	0	0	0
286 Tennessee Technological University	0	0	0	0	0	0	0	0
287 Dartmouth College	0	0	0	0	0	0	0	0
288 Antioch University	0	0	0	0	0	0	0	0
289 Meharry Medical College	0	10	5	9	9	0	0	0
290 The American University	0	0	0	0	0	0	0	0
Total, 1st 290 insts.	38,582	38,768	40,094	39,924	41,168	42,256	41,305	50,573
291 George Peabody College for Teachers	0	0	0	0	0	0	0	0
292 University of Oregon	0	0	0	0	0	0	0	0
293 Drexel University	0	0	0	0	0	0	0	0
294 Wesleyan University	0	0	0	0	0	0	0	0
295 University of Missouri - Rolla	0	0	0	0	0	0	0	0
296 New School for Social Research	0	0	0	0	0	0	0	0
297 Indiana University of Pennsylvania	0	0	0	0	0	0	0	0
298 Colorado School of Mines	0	0	0	0	0	0	0	0
299 Santa Clara University	0	0	0	0	0	0	0	0
300 University of Calif at Santa Cruz	0	0	0	0	0	0	0	0
Total, 1st 300 insts.	38,582	38,768	40,094	39,924	41,168	42,256	41,305	50,573

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-14. Graduate students in health fields in doctorate-granting institutions, ranked by 1991 total graduate students in health fields: 1984-91**

Page 6 of 6

Institutional ranking	1984	1985	1986	1987	1988	1989	1990	1991
301 College of William and Mary	0	0	0	0	0	0	0	0
302 The Wright Institute	0	0	0	0	0	0	0	0
303 Oregon Grad Inst of Science & Technolog	0	0	0	0	0	0	0	0
304 Desert Research Institute	0	0	0	0	0	0	0	0
305 Clarkson University	0	0	0	0	0	0	0	0
306 University of Calif at Riverside	0	0	0	0	0	0	0	0
307 South Dakota School of Mines and Tech	0	0	0	0	0	0	0	0
308 Bryn Mawr College	0	0	0	0	0	0	0	0
309 University of Missouri - St Louis	0	0	0	0	0	0	0	0
310 US Naval Postgraduate School	0	0	0	0	0	0	0	0
Total, 1st 310 insts.	38,582	38,768	40,094	39,924	41,168	42,256	41,305	50,573
311 Golden Gate University	0	0	0	0	0	0	0	0
312 University of Massachusetts at Worcaste	0	0	0	0	0	0	0	0
313 Fuller Theological Seminary	0	0	0	0	0	0	0	0
314 Claremont Univ Center & Graduate School	0	0	0	0	0	0	0	0
315 Calif Sch of Prof Psych-Berkeley/Alamed	0	0	0	0	0	0	0	0
316 Providence College	0	0	0	0	0	0	0	0
317 Calif Sch of Prof Psych - Los Angeles	0	0	0	0	0	0	0	0
318 Rosemead Graduate School of Psychology	0	0	0	0	0	0	0	0
319 Brown University	0	0	0	0	0	0	0	0
320 Eastern Virginia Medical School	0	0	0	0	0	0	0	0
Total, 1st 320 insts.	38,582	38,768	40,094	39,924	41,168	42,256	41,305	50,573
321 Rand Graduate School of Policy Studies	0	0	0	0	0	0	0	0
322 Villanova University	0	0	0	0	0	0	0	0
323 Maharishi International University	0	0	0	0	3	0	0	0
324 Calif Sch of Prof Psych - San Diego	0	0	0	0	0	0	0	0
325 West Virginia Sch of Osteopathic Med	0	0	0	0	0	0	0	0
326 Oklahoma Coll of Osteo Med & Surgery	0	0	0	0	0	0	0	0
327 US International University	0	0	0	0	0	0	0	0
328 Calif Sch of Prof Psych - Fresno	0	0	0	0	0	0	0	0
329 California Institute of Integral Studie	0	0	0	0	0	0	0	0
330 Heed University	0	0	0	0	0	0	0	0
Total, 1st 330 insts.	38,582	38,768	40,094	39,924	41,171	42,256	41,305	50,573
331 Fordham University	0	0	0	0	0	0	0	0
332 California Institute of Technology	0	0	0	0	0	0	0	0
333 Biola University	0	0	0	0	0	0	0	0
334 NE Ohio Univ Med School	0	0	0	0	0	0	0	0
335 Caribbean Center for Advanced Studies	0	0	0	0	0	0	0	0
336 The Fielding Institute	0	0	0	0	0	0	0	0
337 University of Alaska at Fairbanks	0	0	0	0	0	0	0	0
338 Coll of Osteopathic Med of the Pacific	0	0	0	0	0	0	0	0
339 Carnegie-Mellon University	0	0	0	0	0	0	0	0
340 Pacific Grad School of Prof Psych	0	0	0	0	0	0	0	0
Total, 1st 340 insts.	38,582	38,768	40,094	39,924	41,171	42,256	41,305	50,573
341 Chicago School of Prof Psych	0	0	0	0	0	0	0	0
342 Forest Institute of Prof Psych	0	0	0	0	0	0	0	0
343 Ponce School of Medicine	0	0	0	0	0	0	0	0
344 Morehouse School of Medicine	0	0	0	0	0	0	0	0
345 University of Arkansas	0	0	0	0	0	0	0	0
346 University of Notre Dame	0	0	0	0	0	0	0	0
347 Medical College of Wisconsin	0	0	0	0	0	0	0	0
348 Charles R. Drew Univ of Medicine & Sci	0	0	0	0	0	0	0	0
Total, 1st 348 insts.	38,582	38,768	40,094	39,924	41,171	42,258	41,305	50,573

NOTE: Includes medical schools

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table F-15. Graduate science and engineering students, by enrollment status, and total postdoctoral appointees in master's-granting institutions, ranked by total graduate science and engineering students: 1991**

Page 1 of 5

Institutional ranking	Total students	Full-time students	Part-time students	Postdoctoral appointees
Total, all institutions	64,395	21,913	42,482	92
1 Calif State Univ at Long Beach	2,236	498	1,738	3
2 San Jose State University	2,151	337	1,814	0
3 Calif State University at Northridge	1,680	390	1,290	1
4 San Francisco State University	1,292	625	667	0
5 University of Houston at Clear Lake Cit	1,287	396	891	0
6 Calif State Univ at Fullerton	1,125	151	974	2
7 Calif State Univ at Los Angeles	1,114	130	984	0
8 Eastern Michigan University	987	310	677	0
9 Rochester Institute of Technology	963	144	819	0
10 St Mary's College of Minnesota	938	0	938	0
Total, 1st 10 insts.	13,773	2,981	10,792	6
11 Pepperdine University	935	249	686	0
12 Calif State Univ at Hayward	906	262	644	0
13 Calif State University at Sacramento	896	353	543	0
14 John F Kennedy University	850	320	530	0
15 University of New Haven	837	166	671	0
16 Calif State University at Fresno	816	400	416	0
17 Loyola College	806	218	588	0
18 CUNY Brooklyn College	799	378	421	9
19 The Hartford Graduate Center	780	3	777	0
20 Russell Sage College	776	80	696	0
Total, 1st 20 insts.	22,174	5,410	16,764	15
21 National University	767	419	348	0
22 Sangamon State University	764	154	610	0
23 Southwest Texas State University	710	286	424	0
24 Southern Illinois Univ at Edwardsville	677	416	261	0
25 National Technological University	657	0	657	0
26 Univ of North Carolina at Charlotte	650	211	439	8
27 Governors State University	618	73	545	0
28 Iona College	614	41	573	0
29 University of Nebraska - Omaha	591	109	482	0
30 Northeastern Illinois University	550	33	517	0
Total, 1st 30 insts.	28,772	7,152	21,620	23
31 CUNY John Jay College of Crim Justice	533	82	451	0
32 Middle Tennessee State University	529	130	399	0
33 Montclair State College	512	64	448	0
34 Calif State University at Chico	504	350	154	0
35 Towson State University	500	162	338	0
36 Calif State Univ at Dominguez Hills	486	201	285	0
37 Western Illinois University	476	338	138	0
38 CUNY Queens College	473	112	361	5
39 CUNY Bernard Baruch College	471	166	305	0
40 St Joseph's University	461	30	431	0
Total, 1st 40 insts.	33,717	8,787	24,930	28
41 Univ of West Virginia Coll of Grad Stds	443	36	407	0
42 University of Nevada at Las Vegas	425	221	204	9
43 Calif State Polytechnic Univ at Pomona	417	91	326	0
44 Calif Poly State Univ at San Luis Obisp	404	314	90	0
45 University of West Florida	401	138	263	0
46 Hood College	391	17	374	0
47 Central Missouri State University	362	143	219	0
48 Manhattan College	362	86	276	0
49 Arkansas State University	357	135	222	0
50 Murray State University	356	174	182	0
Total, 1st 50 insts.	37,635	10,142	27,493	37
51 Texas A & I University	351	164	187	1
52 Milwaukee School of Engineering	349	0	349	0
53 Mankato State University	346	247	99	0
54 Pittsburg State University	342	205	137	0
55 Roosevelt University	337	49	288	0
56 Shippensburg University of Pennsylvania	336	91	245	0
57 Humboldt State University	330	248	82	0
58 University of La Verne	320	49	271	0
59 University of Texas at San Antonio	310	83	227	2
60 West Chester University of Pennsylvania	306	105	201	0
Total, 1st 60 insts.	40,962	11,383	29,579	40

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-15. Graduate science and engineering students, by enrollment status, and total postdoctoral appointees in master's-granting institutions, ranked by total graduate science and engineering students: 1991**

Page 2 of 5

Institutional ranking	Total students	Full-time students	Part-time students	Postdoctoral appointees
61 University of Hartford	303	88	215	0
62 Western Washington University	300	263	37	2
63 University of Wisconsin - Oshkosh	299	92	207	0
64 Eastern Washington University	297	197	100	0
65 Marist College	293	43	250	0
66 College of New Rochelle	283	30	253	0
67 University of Central Arkansas	277	216	61	0
68 University of Baltimore	272	67	205	0
69 Jackson State University	269	128	141	0
70 Azusa Pacific University	269	145	124	0
Total, 1st 70 Insts.	43,824	12,652	31,172	42
71 Valdosta State College	266	141	125	0
72 Georgia College	262	87	175	0
73 University of Tennessee at Chattanooga	261	71	190	0
74 Gannon University	260	67	193	0
75 SUNY College at Brockport	255	36	219	0
76 Bradley University	255	178	77	1
77 Alabama A & M University	254	222	32	15
78 North Carolina A & T State University	253	195	58	1
79 Monmouth College(NJ)	250	48	202	0
80 University of Wisconsin - Stout	246	185	61	0
Total, 1st 80 Insts.	46,386	13,882	32,504	59
81 Appalachian State University	242	165	77	0
82 Texas Southern University	240	140	100	3
83 Seattle University	239	54	185	0
84 Western New England College	238	0	238	0
85 Grand Valley State University	232	64	168	0
86 West Texas State University	231	83	148	0
87 Radford University	228	143	85	0
88 West Coast University	228	228	0	0
89 Sonoma State University	226	31	195	0
90 Tennessee State University	226	62	164	1
Total, 1st 90 insts.	48,716	14,852	33,864	63
91 SUNY College at New Paltz	225	75	150	0
92 Edinboro University of Pennsylvania	220	119	101	0
93 University of Texas at Tyler	220	83	137	0
94 Calif State Univ at San Bernardino	218	94	124	0
95 Southwest Missouri State University	217	134	83	0
96 SUNY College at Oswego	216	90	126	1
97 Northern Michigan University	215	70	145	0
98 Southern University A & M College	212	53	159	0
99 California University of Pennsylvania	209	133	76	0
100 Western Kentucky University	208	110	98	0
Total, 1st 100 insts.	50,876	15,813	35,063	64
101 Loyola Marymount University	207	116	91	0
102 Northeastern State University	204	67	137	0
103 Southern Connecticut State University	203	96	107	0
104 Chapman University	199	78	121	0
105 Quinnipiac College	197	23	174	0
106 University of Central Texas	197	71	126	0
107 MGH Institute of Health Professions	193	120	73	0
108 University of San Francisco	191	69	122	0
109 Slippery Rock University of Pennsylvania	190	171	19	0
110 Corpus Christi State University	189	44	145	0
Total, 1st 110 insts.	52,846	16,668	36,178	64
111 University of San Diego	188	35	153	0
112 University of Massachusetts Dartmouth	187	69	118	0
113 Youngstown State University	186	66	120	0
114 Moorhead State University	184	140	44	0
115 University of Alaska at Anchorage	184	51	133	0
116 University of Arkansas at Little Rock	183	59	124	0
117 California State Univ - Bakersfield	182	54	128	0
118 Chicago State University	176	80	96	0
119 Eastern Illinois University	176	131	45	0
120 St. Joseph College	176	6	170	0
Total, 1st 120 Insts.	54,668	17,359	37,309	64

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-15. Graduate science and engineering students, by enrollment status, and total postdoctoral appointees in master's-granting institutions, ranked by total graduate science and engineering students: 1991**

Page 3 of 5

Institutional ranking	Total students	Full-time students	Part-time students	Postdoctoral appointees
121 Kutztown University of Pennsylvania	173	31	142	0
122 Drake University	172	35	137	0
123 Eastern Kentucky University	171	115	56	0
124 Troy State University in Montgomery	169	75	94	0
125 American International College	164	37	127	0
126 Northwest State University	161	45	116	0
127 James Madison University	159	91	68	0
128 Calif State Univ of Stanislaus	153	104	49	0
129 Jacksonville State University	151	52	99	0
130 Assumption College	143	55	88	0
Total, 1st 130 insts.	56,284	17,999	38,285	64
131 Prairie View A & M University	143	120	23	0
132 Midwestern State University	142	88	54	0
133 McNeese State University	142	55	87	0
134 Rivier College	140	20	120	0
135 Incarnate Word College	140	43	97	0
136 University of Scranton	137	51	86	0
137 Georgia Southern University	135	82	53	2
138 William Paterson College	135	40	95	1
139 Widener University	133	35	98	0
140 Central Washington University	132	86	46	0
Total, 1st 140 insts.	57,663	18,619	39,044	67
141 Kean College of New Jersey	131	29	102	0
142 Western Carolina University	131	62	69	0
143 Emporia State University - Kansas	129	95	34	0
144 Clarion University of Pennsylvania	127	63	64	0
145 Millersville University of Pennsylvania	124	34	90	0
146 Angelo State University	123	57	66	0
147 University of Wisconsin - Eau Claire	122	57	65	0
148 West Georgia College	121	79	42	0
149 College of St Rose	121	44	77	0
150 Rose-Hulman Institute of Technology	120	51	69	0
Total, 1st 150 insts.	58,912	19,190	39,722	67
151 Marywood College	119	21	98	0
152 Trinity University	118	47	71	0
153 Tuskegee University	116	107	9	0
154 Salem State College	113	2	111	0
155 Xavier University	113	102	11	0
156 University of Wisconsin - Stevens Point	111	101	10	0
157 Hampton University	110	80	30	5
158 Dominican College of San Rafael	109	66	43	0
159 Eastern New Mexico University	103	16	87	0
160 East Stroudsburg Univ of Pennsylvania	103	39	64	0
Total, 1st 160 insts.	60,027	19,771	40,256	72
161 Anna Maria College	102	11	91	0
162 Abilene Christian University	102	83	19	0
163 Wagner College	96	21	75	0
164 Fort Hays State University	95	66	29	0
165 University of the District of Columbia	93	36	57	0
166 CUNY College of Staten Island St George	93	43	50	0
167 Bloomsburg University of Pennsylvania	92	44	48	0
168 Montana College Mineral Sci & Technolog	91	76	15	0
169 Rhode Island College	84	21	63	0
170 University of Wisconsin - La Crosse	81	55	26	0
Total, 1st 170 insts.	60,956	20,227	40,729	72
171 Pacific Lutheran University	81	29	52	0
172 University of Wisconsin - Whitewater	76	45	31	0
173 North Carolina Central University	76	33	43	0
174 University of North Carolina/Wilmington	74	12	62	0
175 Fort Valley State College	73	30	43	0
176 St. Cloud State University	70	49	21	0
177 SUNY College of Technology at Utica/Rom	70	22	48	0
178 Morehead State University	69	37	32	0
179 College of Charleston	67	48	19	0
180 Winthrop College	65	33	32	0
Total, 1st 180 insts.	61,677	20,565	41,112	72

See explanatory information, if any, and SOURCE(S) at end of table.

319



**Table F-15. Graduate science and engineering students, by enrollment status, and total postdoctoral appointees in master's-granting institutions, ranked by total graduate science and engineering students: 1991**

Page 4 of 5

Institutional ranking	Total students	Full-time students	Part-time students	Postdoctoral appointees
181 Frostburg State University	64	38	26	0
182 Virginia State University	64	40	24	0
183 Valparaiso University	62	21	41	0
184 University of Evansville	60	4	56	0
185 Morgan State University	57	28	29	0
186 University of Texas of the Permian Basin	57	13	44	0
187 Bucknell University	57	49	8	3
188 University of Wisconsin - River Falls	55	28	27	0
189 Cooper Union	54	25	29	0
190 New Mexico Highlands University	54	40	14	0
Total, 1st 190 Insts.	62,261	20,851	41,410	75
191 Trinity College	53	0	53	0
192 University of Redlands	51	39	12	0
193 John Carroll University	51	32	19	0
194 Southern Oregon State College	50	29	21	0
195 Augusta College	49	34	15	0
196 University of Portland	48	8	40	0
197 Washington College	47	0	47	0
198 Tarleton State University	47	17	30	0
199 Bridgewater State College	46	21	25	0
200 Kearney State College	46	22	24	0
Total, 1st 200 Insts.	62,749	21,053	41,696	75
201 Saint Francis College	46	6	40	0
202 University of Wisconsin - Green Bay	45	20	25	0
203 St Mary's University of San Antonio	45	9	36	0
204 Northwest Missouri State University	44	23	21	0
205 Southeast Missouri State University	43	37	6	0
206 Sul Ross State University	43	30	13	0
207 Sarah Lawrence College	42	41	1	0
208 SUNY College at Geneseo	42	34	8	0
209 Wilkes University	41	8	33	0
210 Nicholls State University	40	21	19	0
Total, 1st 210 Insts.	63,180	21,282	41,898	75
211 Telkys Marycrest College	38	14	24	0
212 Austin Peay State University	37	28	9	0
213 Goddard College	35	35	0	0
214 Trenton State College	35	4	31	0
215 SUNY College at Plattsburgh	35	30	5	2
216 University of Bridgeport	33	11	22	0
217 Southeastern Louisiana University	32	29	3	0
218 Central Connecticut State University	32	7	25	0
219 Lincoln University	32	8	24	0
220 Washburn University of Topeka	32	15	17	0
Total, 1st 220 Insts.	63,521	21,463	42,058	77
221 Western Connecticut State University	32	0	32	0
222 Connecticut College	31	28	3	0
223 Coppin State College	31	3	28	0
224 Saint Martin's College	30	8	22	0
225 University of Montevallo	29	17	12	0
226 Fisk University	29	26	3	4
227 Mississippi University for Women	28	16	12	0
228 Northeast Missouri State University	28	26	2	0
229 University of Richmond	28	17	11	0
230 University of Houston - Victoria	27	10	17	0
Total, 1st 230 Insts.	63,814	21,614	42,200	81
231 Jacksonville University	26	0	26	0
232 University of Alaska Southeast	26	1	25	0
233 Gallaudet University	25	25	0	0
234 Pacific States University	25	15	10	0
235 SUNY College at Buffalo	24	4	20	0
236 Loras College	23	0	23	0
237 Indiana Wesleyan University	23	8	15	0
238 Delaware State College	23	1	22	0
239 University of Wisconsin - Platteville	23	12	11	0
240 Ithaca College	22	21	1	0
Total, 1st 240 Insts.	64,054	21,701	42,353	81

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-15. Graduate science and engineering students, by enrollment status, and total postdoctoral appointees in master's-granting institutions, ranked by total graduate science and engineering students: 1991**

Page 5 of 5

Institutional ranking	Total students	Full-time students	Part-time students	Postdoctoral appointees
241 Drew University	21	14	7	0
242 SUNY College at Fredonia	21	6	15	0
243 Bemidji State University	20	10	10	0
244 Butler University	20	3	17	0
245 Mansfield University of Pennsylvania	16	9	7	0
246 St Bonaventure University	15	15	0	0
247 Whitworth College	15	4	11	0
248 West Virginia Institute of Technology	15	13	2	0
249 Southwestern Oklahoma State University	15	7	8	0
250 Williams College	14	14	0	0
Total, 1st 250 Insts.	64,226	21,796	42,430	81
251 Mount Holyoke College	14	13	1	0
252 SUNY College at Cortland	14	8	6	0
253 Niagara University	13	10	3	0
254 Framingham State College	12	4	8	0
255 University of Guam	12	12	0	0
256 The University of Texas - Pan American	12	0	12	0
257 Alabama State University	10	8	2	0
258 Grambling State University	9	7	2	0
259 Gonzaga University	9	7	2	0
260 Pacific University	9	9	0	0
Total, 1st 260 Insts.	64,340	21,874	42,466	81
261 Pratt Institute	8	6	2	0
262 East Central University	8	7	1	6
263 Furman University	7	7	0	1
264 Harvey Mudd College	6	6	0	0
265 SUNY College at Oneonta	5	3	2	0
266 Hollins College	5	4	1	0
267 Walla Walla College	5	3	2	0
268 Vassar College	3	0	3	0
269 SUNY College at Potsdam	2	0	2	0
270 Loyola University in New Orleans	2	1	1	0
Total, 1st 270 Insts.	64,391	21,911	42,480	88
271 Middlebury College	1	1	0	1
272 University of Charleston	1	0	1	0
273 Occidental College	1	1	0	0
274 Worcester State College	1	0	1	0
275 Swarthmore College	0	0	0	3
276 Marlboro College	0	0	0	0
Total, 1st 276 Insts.	64,395	21,913	42,482	92

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table F-16. Graduate science and engineering students, by enrollment status, and total postdoctoral appointees in historically black colleges and universities, ranked by total graduate science and engineering students: 1991**

Page 1 of 1

Institutional ranking	Total students	Full-time students	Part-time students	Postdoctoral appointees
Total, all institutions	3,855	2,339	1,516	84
1 Howard University	778	487	291	20
2 Clark Atlanta University	282	200	82	8
3 Jackson State University	269	128	141	0
4 Alabama A & M University	254	222	32	15
5 North Carolina A & T State University	253	195	58	1
6 Texas Southern University	240	140	100	3
7 Tennessee State University	226	62	164	1
8 Southern University A & M College	212	53	159	0
9 Florida A & M University	182	116	66	3
10 Prairie View A & M University	143	120	23	0
Total, 1st 10 insts.	2,839	1,723	1,116	51
11 Xavier University	135	84	51	7
12 Tuskegee University	116	107	9	0
13 Hampton University	110	80	30	5
14 University of Maryland Eastern Shore	104	71	33	0
15 University of the District of Columbia	93	36	57	0
16 North Carolina Central University	76	33	43	0
17 Fort Valley State College	73	30	43	0
18 Virginia State University	64	40	24	0
19 Morgan State University	57	28	29	0
20 Meharry Medical College	54	54	0	5
Total, 1st 20 insts.	3,721	2,286	1,435	68
21 Lincoln University	32	8	24	0
22 Coppin State College	31	3	28	0
23 Fisk University	29	26	3	4
24 Delaware State College	23	1	22	0
25 Alabama State University	10	8	2	0
26 Grambling State University	9	7	2	0
27 Morehouse School of Medicine	0	0	0	12
Total, 1st 27 insts.	3,855	2,339	1,516	84

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table F-17. Graduate science and engineering students, by enrollment status, and total postdoctoral appointees in land-grant institutions, ranked by total graduate science and engineering students: 1991**

Page 1 of 2

Institutional ranking	Total students	Full-time students	Part-time students	Postdoctoral appointees
Total, all institutions	145,328	115,046	30,282	10,703
1 University of Wisconsin - Madison	5,914	5,161	753	502
2 University of Minnesota	5,720	4,808	912	416
3 Ohio State University	5,439	4,688	751	295
4 Texas A & M University	5,009	4,261	748	198
5 University of Calif at Berkeley	4,979	4,979	0	654
6 University of Illinois at Urbana	4,938	4,935	3	263
7 Pennsylvania State University	4,419	3,178	1,241	217
8 Rutgers the State University	4,375	2,283	2,092	220
9 Massachusetts Institute of Technology	4,243	4,187	56	430
10 University of Calif at Los Angeles	4,171	4,170	1	620
Total, 1st 10 insts.	49,207	42,650	6,557	3,815
11 Purdue University	4,022	3,706	316	225
12 University of Maryland - College Park	3,876	2,388	1,488	133
13 Cornell University	3,453	3,453	0	480
14 University of Arizona	3,391	2,864	527	302
15 University of Illinois at Chicago	3,355	2,026	1,329	150
16 University of Massachusetts	3,262	1,500	1,762	225
17 North Carolina State Univ at Raleigh	3,115	2,509	606	192
18 Virginia Polytechnic Inst and State Uni	3,113	2,539	574	122
19 Michigan State University	3,103	2,610	493	176
20 Louisiana State University System	2,848	2,272	576	256
Total, 1st 20 insts.	82,745	68,517	14,228	6,076
21 Iowa State University of Sci & Tech	2,818	2,332	486	160
22 University of Tennessee at Knoxville	2,789	1,623	1,166	137
23 University of Calif at Davis	2,579	2,446	133	213
24 University of Hawaii at Manoa	2,092	1,767	325	50
25 University of Kentucky	2,019	1,567	452	242
26 Colorado State University	2,010	1,456	554	193
27 University of Missouri - Columbia	1,983	1,316	667	98
28 University of Calif at San Diego	1,902	1,743	159	653
29 Oregon State University	1,861	1,737	124	73
30 Auburn University	1,844	924	850	41
Total, 1st 30 insts.	104,642	85,498	19,144	7,936
31 Oklahoma State University	1,813	734	1,079	43
32 Clemson University	1,795	1,394	401	36
33 University of Georgia	1,666	1,486	180	150
34 West Virginia University	1,643	1,106	537	57
35 Kansas State University	1,532	1,309	223	63
36 University of Calif at Santa Barbara	1,530	1,515	15	150
37 Florida State University	1,503	1,093	410	72
38 University of Delaware	1,447	1,075	372	66
39 Washington State University	1,353	1,181	172	120
40 University of Calif at Irvine	1,344	1,260	84	274
Total, 1st 40 insts.	120,268	97,651	22,617	8,967
41 University of Rhode Island	1,339	883	456	28
42 University of Arkansas	1,269	745	524	31
43 University of Missouri - Rolla	1,261	704	557	14
44 Utah State University	1,248	1,105	143	25
45 University of Puerto Rico - Rio Piedras	1,213	824	389	6
46 Mississippi State University	1,161	969	192	19
47 University of Maryland - Balt Prof Sch	1,069	518	551	83
48 University of Idaho	1,068	537	531	36
49 University of Calif at San Francisco	1,034	1,010	24	929
50 University of Wyoming	1,029	791	238	24
Total, 1st 50 insts.	131,959	105,737	26,222	10,162
51 University of Maryland - Baltimore Cnty	1,028	566	460	24
52 New Mexico State University	956	695	261	23
53 University of Nevada at Reno	871	718	153	38
54 University of Missouri - Kansas City	790	286	504	15
55 University of Calif at Riverside	733	722	11	130
56 University of Puerto Rico Med Sci Campu	724	516	208	0
57 University of Maine	711	567	144	11
58 University of New Hampshire	697	573	124	4
59 University of Vermont & St Agric Colleg	648	496	152	76
60 South Dakota State University	629	413	216	2
Total, 1st 60 insts.	139,744	111,289	28,455	10,485

See explanatory information, if any, and SOURCE(S) at end of table.

315

**Table F-17. Graduate science and engineering students, by enrollment status, and total postdoctoral appointees in land-grant institutions, ranked by total graduate science and engineering students: 1991**

Page 2 of 2

Institutional ranking	Total students	Full-time students	Part-time students	Postdoctoral appointees
61 University of Calif at Santa Cruz	628	216	12	48
62 North Dakota State University	615	509	106	25
63 University of Nebraska - Omaha	591	109	482	0
64 Montana State University	521	462	59	33
65 University of Alaska at Fairbanks	480	329	151	3
66 University of Puerto Rico	439	428	11	0
67 University of Missouri - St Louis	281	195	86	19
68 University of Tennessee at Chattanooga	261	71	190	0
69 Alabama A & M University	254	222	32	15
70 North Carolina A & T State University	253	195	58	1
Total, 1st 70 insts.	144,067	114,425	29,642	10,629
71 Tennessee State University	226	62	164	1
72 University of Tennessee, Memphis	213	155	58	70
73 Southern University A & M College	212	53	159	0
74 Florida A & M University	182	116	66	3
75 Prairie View A & M University	143	120	23	0
76 University of the District of Columbia	93	36	57	0
77 Fort Valley State College	73	30	43	0
78 Virginia State University	64	40	24	0
79 Lincoln University	32	8	24	0
80 Delaware State College	23	1	22	0
Total, 1st 80 insts.	145,328	115,046	30,282	10,703

NOTE: Includes medical schools

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table F-18. Graduate students in the science, engineering, and health fields  
in medical schools, by area, ranked by total graduate students  
in surveyed fields: 1991**

Page 1 of 3

Institutional ranking	Total, all surveyed fields	Sciences, total	Engi- neering, total	Health fields
Total, all institutions	27,338	14,573	240	12,525
1 The University of Alabama at Birmingham	1,041	354	0	687
2 University of Calif at San Francisco	1,034	275	23	736
3 Univ of Texas Hlth Sci Ctr at Houston	962	428	0	534
4 University of Oklahoma	868	187	0	681
5 Columbia University Main Division	802	251	0	551
6 University of Iowa	789	191	0	598
7 Boston University	762	354	0	408
8 University of Puerto Rico Med Sci Campu	724	113	0	611
9 University of Colorado	690	148	0	542
10 Yale University	674	433	0	241
Total, 1st 10 insts.	8,346	2,734	23	5,589
11 Emory University	597	160	0	437
12 Hahnemann University	572	387	0	185
13 Univ of North Carolina at Chapel Hill	534	325	41	168
14 Univ of Texas Hlth Sci Ctr San Antonio	500	133	0	367
15 Rush University	479	92	0	387
16 Tulane University of Louisiana	468	0	0	468
17 University of Florida	459	139	0	320
18 University of Calif at Los Angeles	416	315	0	101
19 University of Kansas	407	99	0	308
20 Indiana University	363	231	0	132
Total, 1st 20 insts.	13,141	4,615	64	8,462
21 University of Michigan	362	270	0	92
22 University of Washington	357	235	83	39
23 Univ of Texas SW Medical Ctr at Dallas	355	259	25	71
24 Univ of Texas Med Branch at Galveston	355	128	0	227
25 University of Rochester	341	269	0	72
26 University of Cincinnati	323	183	0	140
27 Wayne State University	317	203	0	114
28 Baylor College of Medicine	303	246	0	57
29 Stanford University	302	217	0	85
30 Duke University	296	276	0	20
Total, 1st 30 insts.	16,452	6,901	172	9,379
31 Univ of Med and Dent of New Jersey	291	239	0	52
32 Medical College of Ohio at Toledo	290	0	0	290
33 Northwestern University	286	213	0	73
34 University of Wisconsin - Madison	281	147	0	134
35 Case Western Reserve University	277	229	0	48
36 University of Nebraska Medical Center	272	60	0	212
37 Johns Hopkins University	272	170	68	34
38 Thomas Jefferson University	269	183	0	86
39 University of Connecticut	265	73	0	192
40 Ohio State University	258	124	0	134
Total, 1st 40 insts.	19,213	8,339	240	10,634
41 University of Minnesota	239	214	0	25
42 University of Arkansas - Med Sci Campus	226	61	0	165
43 University of Southern California	215	170	0	45
44 University of Tennessee, Memphis	213	112	0	101
45 Vanderbilt University	205	154	0	51
46 New York Medical College	203	160	0	43
47 Temple University	202	116	0	86
48 Medical College of Georgia	200	82	0	118
49 University of Calif at San Diego	197	99	0	98
50 Yeshiva University	196	171	0	25
Total, 1st 50 insts.	21,309	9,678	240	11,391
51 New York University	194	128	0	66
52 University of Utah	192	105	0	87
53 University of Virginia	190	159	0	31
54 Georgetown University	187	187	0	0
55 Cornell University	187	164	0	23
56 University of Miami	182	182	0	0
57 Louisiana State University System	171	171	0	0
58 Washington University	170	13	0	157
59 Medical University of South Carolina	167	154	0	13
60 CUNY Mt. Sinai Sch of Medicine	164	164	0	0
Total, 1st 60 insts.	23,113	11,105	240	11,768

See explanatory information, if any, and SOURCE(S) at end of table.



**Table F-18. Graduate students in the science, engineering, and health fields  
in medical schools, by area, ranked by total graduate students  
in surveyed fields: 1991**

Page 2 of 3

Institutional ranking	Total, all surveyed fields	Sciences, total	Engi- neering, total	Health fields
61 SUNY - Buffalo	158	133	0	25
62 Tufts University	153	145	0	8
63 University of Mississippi	144	70	0	74
64 University of Calif at Irvine	143	105	0	38
65 University of Kentucky	136	124	0	12
66 University of Health Sciences (Chicago)	131	124	0	7
67 St. Louis University	125	85	0	40
68 University of Massachusetts	124	97	0	27
69 Mayo Graduate School	120	104	0	18
70 Oregon Health Sciences University	119	118	0	1
Total, 1st 70 Insts.	24,466	12,210	240	12,016
71 Uniformed Serv Univ of the Hlth Science	118	88	0	30
72 Eastern Virginia Medical School	118	118	0	0
73 University of Pittsburgh	115	115	0	0
74 SUNY - Health Sci Ctr at Brooklyn	115	98	0	17
75 Wake Forest University	113	101	0	12
76 Pennsylvania State University	113	96	0	17
77 Loyola University of Chicago	112	112	0	0
78 SUNY - Stony Brook	112	112	0	0
79 University of Arizona	111	111	0	0
80 University of Hawaii at Manoa	111	93	0	18
Total, 1st 80 Insts.	25,604	13,254	240	12,110
81 The Medical College of Pennsylvania	109	78	0	31
82 Medical College of Wisconsin	102	102	0	0
83 University of Vermont & St Agric Colleg	98	84	0	14
84 University of Louisville	96	96	0	0
85 Loma Linda University	91	74	0	17
86 Texas College of Osteopathic Medicine	89	0	0	89
87 Albany Medical College Grad Studies Pro	87	70	0	17
88 Dartmouth College	65	85	0	0
89 SUNY - Health Sci Ctr at Syracuse	82	68	0	14
90 Creighton University	76	31	0	45
Total, 1st 90 Insts.	26,519	13,942	240	12,337
91 George Washington University	76	76	0	0
92 Univ. of Osteopathic Med & Health Sci	74	0	0	74
93 Texas Tech University	74	33	0	41
94 Howard University	69	69	0	0
95 West Virginia University	64	62	0	2
96 University of New Mexico	58	58	0	0
97 University of South Alabama	55	55	0	0
98 Meharry Medical College	54	54	0	0
99 University of South Florida	49	49	0	0
100 University of South Carolina	49	49	0	0
Total, 1st 100 Insts.	27,141	14,447	240	12,454
101 Baylor College of Dentistry	48	8	0	42
102 University of Nevada at Reno	46	23	0	23
103 East Carolina University	40	40	0	0
104 Marshall University	23	23	0	0
105 University of South Dakota	19	19	0	0
106 Ponce School of Medicine	15	15	0	0
107 Virginia Commonwealth University	3	0	0	3
108 Mercer University	3	0	0	3
109 Morehouse School of Medicine	0	0	0	0
110 NE Ohio Univ Med School	0	0	0	0
Total, 1st 110 Insts.	27,338	14,573	240	12,525
111 West Virginia Sch of Osteopathic Med	0	0	0	0
112 Ohio University	0	0	0	0
113 New York Institute of Technology	0	0	0	0
114 Univ of Texas MD Anderson Cancer Center	0	0	0	0
115 University of Pennsylvania	0	0	0	0
116 Phila College of Osteopathic Medicine	0	0	0	0
117 University of Missouri - Columbia	0	0	0	0
118 Kirksville College of Osteopathic Med	0	0	0	0
119 Univ of Health Sciences (Kansas City)	0	0	0	0
120 Harvard University	0	0	0	0
Total, 1st 120 Insts.	27,338	14,573	240	12,525

See explanatory information, if any, and SOURCE(S) at end of table.

**Table F-18. Graduate students in the science, engineering, and health fields  
in medical schools, by area, ranked by total graduate students  
in surveyed fields: 1991**

Page 3 of 3

Institutional ranking	Total, all surveyed fields	Sciences, total	Engi- neering, total	Health fields
121 University of New England	0	0	0	0
122 University of Chicago	0	0	0	0
123 Chicago Coll of Osteo Medicine	0	0	0	0
124 Charles R. Drew Univ of Medicine & Sci	0	0	0	0
Total, 1st 124 Insts.	27,338	14,573	240	12,525

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

## Section II.

---

# Technical Notes

### The Survey Universe

The data published in this report for the fall 1991 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSPSE) represent national estimates of graduate enrollment and postdoctoral employment at the beginning of academic year 1991-92 in all academic institutions in the United States that granted doctorate or master's degrees in any science or engineering field. Included are data for all branch campuses, affiliated research centers, and separately organized components such as medical or dental schools, schools of nursing, public health, etc. The survey universe consisted of 729 reporting units at 609 graduate institutions. Included were 453 reporting units associated with 333 doctorate-granting institutions, and 276 master's-granting institutions.

The National Science Foundation has collected data on graduate S&E enrollment and postdoctoral appointees since 1966. From fall 1966 through fall 1971, data from a limited number of doctorate-granting institutions were collected through the NSF Graduate Traineeship Program, which requested data only on those S&E fields supported by NSF. Beginning with the fall 1972 survey, this data collection effort was assigned to the Universities and Nonprofit Institutions Studies Group and was gradually expanded during the period 1972-75 to include additional S&E fields as well as all institutions known to have programs leading to the master's or doctorate degree. Because of this expansion, data for 1974 and earlier years are not strictly comparable with 1975 and later data. Table II-1 shows the number of institutions, reporting units, and departments at each level included in the data, as well as the total enrollment reported for each year between 1966 and 1991. No attempt has been made to inflate the data for 1966-74 to reflect universe totals.

Beginning with the 1984-85 academic year, master's-granting institutions were surveyed on a sample basis. The fall 1988 survey included the entire survey population for the first time since 1983-84. For each year since 1988, any institutions that begin S&E master's or doctoral programs are added to the survey universe, and any that close all their S&E graduate programs are deleted. (See Survey Methodology, p. 313.)

Tables II-2 and II-3 present data on departmental coverage by S&E field for each year covered by the trend data shown in Section I, subsections B and C.

### The Survey Instruments

The Departmental or Program Data Sheet (NSF Form 812) on which data were reported in fall 1991 was identical to the fall 1990 version, except for changes in the instructions to clarify some

Table II-1. The NSF data collection series: 1966-91

Series and year	Number of institutions surveyed	Number of reporting units	Number of departments			Graduate enrollment in surveyed fields		
			Total	Master's	Doctorate	Total	Full-time	Part-time
A. Graduate Traineeship Program								
1966 .....	204	204	2,866	441	2,425	169,303	124,255	45,048
1967 .....	209	209	3,014	434	2,580	179,622	133,972	45,650
1968 .....	219	219	3,190	454	2,736	184,759	140,714	44,045
1969 .....	224	224	3,354	460	2,894	196,341	147,515	48,826
1970 .....	227	227	3,544	473	3,071	201,918	153,250	48,668
1971 .....	224	249	3,397	407	2,990	214,680	164,764	49,916
B. Survey of Graduate Science and Engineering Students and Postdoctorates 1/								
Doctorate institutions								
1972 2/ .....	260	328	4,593	780	3,813	210,895	161,329	49,566
1973 .....	254	336	6,543	862	5,681	214,787	161,858	52,929
1974 .....	279	369	7,496	1,409	6,087	260,970	191,246	69,724
1975 .....	303	400	7,802	1,622	6,180	291,947	206,797	85,150
1976 .....	311	409	7,892	1,671	6,221	295,526	210,117	85,409
1977 .....	313	416	8,112	1,794	6,318	303,448	212,576	90,872
1978 .....	311	420	8,150	1,759	6,391	299,971	209,380	90,591
1979 .....	329	447	8,353	1,863	6,490	312,816	216,301	96,015
1980 .....	328	446	8,458	1,913	6,545	322,846	223,012	99,834
1981 .....	328	444	8,397	1,916	6,481	329,702	226,921	102,781
1982 .....	327	444	8,250	1,899	6,351	336,221	229,993	106,228
1983 .....	327	443	8,139	1,877	6,262	343,071	236,676	106,995
1984 .....	324	444	8,175	1,880	6,295	346,431	237,460	108,971
1985 .....	324	440	8,292	1,915	6,377	356,022	241,605	114,417
1986 .....	324	441	8,366	1,930	6,436	367,163	250,470	116,693
1987 .....	329	448	8,495	1,942	6,553	372,461	254,865	117,596
1988 .....	334	454	8,707	1,993	6,714	377,674	259,848	117,826
1989 .....	334	453	8,839	2,014	6,825	385,025	267,554	117,471
1990 .....	334	454	8,967	2,056	6,911	398,405	275,262	123,143
1991 .....	333	453	9,138	2,078	7,060	411,296	286,756	124,540
Master's institutions								
1975 3/ .....	283	283	1,224	1,224	N/A	37,711	13,692	24,019
1976 .....	285	285	1,242	1,242	N/A	39,234	13,998	25,236
1977 .....	289	289	1,211	1,211	N/A	43,608	15,286	28,322
1978 4/ .....	2	2	18	18	N/A	45,216	15,692	29,524
1979 .....	301	301	1,374	1,374	N/A	47,178	16,288	30,890
1980 .....	299	299	1,388	1,388	N/A	47,047	16,843	30,204
1981 .....	295	295	1,387	1,387	N/A	48,402	16,750	31,652
1982 .....	283	283	1,387	1,387	N/A	48,835	16,225	32,610
1983 .....	283	283	1,388	1,388	N/A	50,977	17,659	33,318
1984 5/ .....	88	88	669	669	N/A	51,747	18,137	33,610
1985 5/ .....	88	88	686	686	N/A	51,920	17,862	34,058
1986 5/ .....	88	88	689	689	N/A	52,175	17,934	34,241
1987 5/ .....	88	88	697	697	N/A	52,897	18,569	34,328
1988 .....	277	277	1,424	1,424	N/A	52,157	18,319	33,838
1989 .....	275	275	1,479	1,479	N/A	55,958	19,065	36,893
1990 .....	276	276	1,516	1,516	N/A	60,538	20,574	39,964
1991 .....	276	276	1,567	1,567	N/A	64,395	21,913	42,482

1/ The name of the survey was changed in 1981 to specify the inclusion of engineering.

2/ The 1972 survey of doctorate-granting institutions included selected data items for 1971.

3/ The 1976 survey of master's-granting institutions included selected data items for 1975.

4/ The 1978 survey did not include master's institutions. Two institutions were subsequently changed from doctorate- to master's-granting. Totals represent estimates based on 1977 and 1979 data.

5/ Master's-granting institutions were surveyed on a sample basis from 1984 through 1987.

KEY: N/A = not applicable

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table II-2. Science and engineering departmental population at doctorate-granting institutions by field: 1983-91

Field	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all surveyed fields .....	8,118	8,154	8,264	8,333	8,439	8,653	8,774	8,759	9,138
Total, science/engineering fields .....	5,855	5,864	5,943	5,982	6,081	6,262	6,344	6,336	6,573
Engineering, total .....	1,056	1,066	1,106	1,118	1,161	1,191	1,201	1,210	1,260
Aerospace .....	35	35	36	36	38	41	41	42	44
Agricultural .....	38	40	42	41	40	40	40	41	41
Biomedical .....	38	42	42	41	46	49	50	50	52
Chemical .....	125	127	127	127	128	130	133	131	138
Civil .....	169	168	175	180	183	186	182	184	192
Electrical .....	158	159	167	167	179	183	188	190	199
Engineering science .....	32	32	34	35	34	35	35	34	36
Industrial .....	95	98	103	104	112	120	126	127	134
Mechanical .....	156	157	166	169	174	176	176	170	177
Metallurgical/materials .....	69	69	73	74	76	78	83	87	95
Mining .....	29	25	26	25	29	29	26	27	28
Nuclear .....	29	29	29	28	27	27	27	26	26
Petroleum .....	15	16	16	16	19	19	19	18	19
Engineering, n.e.c. ....	72	69	70	75	76	78	79	83	79
Sciences, total .....	4,799	4,798	4,837	4,864	4,920	5,071	5,143	5,126	5,313
Physical sciences .....	521	521	521	528	527	531	535	526	544
Astronomy .....	32	32	33	33	33	33	33	33	33
Chemistry .....	250	250	249	250	250	252	255	250	257
Physics .....	233	229	228	230	228	232	235	231	242
Physical sciences, n.e.c. ....	6	10	11	15	16	14	12	12	12
Earth, atmospheric, & ocean sciences ..	287	284	291	292	295	302	304	306	321
Atmospheric sciences .....	27	27	27	27	28	28	28	28	29
Geosciences .....	187	186	188	189	187	191	191	192	200
Oceanography .....	33	33	36	36	37	37	41	40	44
Earth, atmos., & ocean sci., n.e.c. ..	40	38	40	40	43	46	44	46	48
Mathematical sciences .....	332	332	329	334	336	342	346	350	358
Computer sciences .....	146	153	181	193	209	214	216	227	234
Agricultural sciences .....	278	277	277	277	275	277	281	291	300
Biological sciences .....	1,749	1,749	1,758	1,763	1,787	1,813	1,822	1,788	1,862
Anatomy .....	121	118	116	113	113	113	115	106	105
Biochemistry .....	182	181	185	187	188	190	190	182	187
Biology .....	211	212	208	211	214	218	220	221	223
Biometry/epidemiology .....	40	41	44	46	47	48	49	51	55
Biophysics .....	29	30	27	30	31	31	32	29	32
Botany .....	104	106	106	105	106	108	107	98	103
Cell biology .....	57	60	64	73	82	87	88	85	96
Ecology .....	23	23	23	22	22	23	26	27	28
Entomology/parasitology .....	46	46	49	48	47	48	47	48	49
Genetics .....	59	60	60	60	61	64	65	65	72
Microbiology .....	228	229	233	229	230	233	232	232	244
Nutrition .....	94	91	92	93	98	98	98	103	107
Pathology .....	148	148	146	146	148	147	145	143	149
Pharmacology .....	173	170	168	164	164	166	165	158	163
Physiology .....	144	143	143	143	146	146	150	145	146
Zoology .....	56	53	56	57	55	54	52	49	50
Biosciences, n.e.c. ....	34	38	38	36	35	39	41	46	53
Psychology .....	335	337	338	339	346	418	442	450	477
Social sciences .....	1,151	1,145	1,142	1,138	1,145	1,174	1,197	1,188	1,217
Agricultural economics .....	50	51	52	52	51	51	52	52	52
Anthropology .....	112	113	115	113	114	116	117	119	124
Economics (except agricultural) .....	185	185	184	186	188	191	192	188	193
Geography .....	97	95	96	95	95	94	92	91	95
History and philosophy of science .....	26	26	23	22	24	24	24	24	22
Linguistics .....	63	61	62	61	65	68	69	65	70
Political science .....	282	281	279	276	276	290	296	289	296
Sociology .....	168	163	163	159	162	159	165	166	168
Sociology/anthropology .....	33	34	33	34	33	33	32	32	32
Social sciences, n.e.c. ....	135	136	135	140	137	148	158	162	165
Total, health fields .....	2,263	2,290	2,321	2,351	2,358	2,391	2,430	2,423	2,565
Anesthesiology .....	81	82	82	81	80	79	82	79	83
Oncology/cancer research .....	26	27	30	33	32	32	36	37	39
Cardiology .....	70	69	69	69	68	67	67	67	67
Dentistry .....	81	83	85	81	82	82	84	82	83
Endocrinology .....	71	70	69	70	69	71	72	70	73
Gastroenterology .....	67	66	65	65	63	63	63	63	65
Hematology .....	71	70	70	71	70	69	68	65	67
Neurology .....	104	107	107	111	113	118	123	125	133
Nursing .....	101	101	101	106	106	105	97	74	122
Obstetrics/gynecology .....	86	87	89	89	89	91	91	91	91
Ophthalmology .....	77	78	78	77	76	76	77	77	79
Otorhinolaryngology .....	67	68	67	67	67	68	68	69	70
Pediatrics .....	101	100	99	101	105	106	105	104	107
Pharmaceutical sciences .....	79	80	80	81	82	79	84	84	89
Preventive medicine/community health ..	141	141	150	153	152	156	157	161	166
Psychiatry .....	92	93	92	92	94	92	99	101	101
Pulmonary disease .....	65	64	63	64	63	62	63	62	62
Radiology .....	110	113	114	113	116	119	120	123	129
Speech pathology/audiology .....	119	119	123	122	120	122	123	122	127
Surgery .....	208	213	213	214	213	216	216	214	230
Veterinary sciences .....	33	34	33	34	35	36	37	41	41
Clinical medicine, n.e.c. ....	277	288	298	306	306	313	316	322	343
Health related, n.e.c. ....	136	137	144	151	157	169	182	190	198

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 11-3. Science and engineering departmental population at master's-granting institutions by field: 1983-91

Field	1983	1984 1/	1985 1/	1986 1/	1987 1/	1988	1989	1990	1991
Total, all surveyed fields .....	1,384	666	681	684	692	1,410	1,464	1,488	1,567
Total, science/engineering fields .....	1,243	593	607	609	616	1,250	1,300	1,322	1,374
Engineering, total .....	152	97	103	105	108	170	186	198	204
Aerospace .....	2	0	0	0	3	3	3	3	2
Agricultural .....	0	0	0	0	0	0	0	0	0
Biomedical .....	3	2	2	2	2	3	3	3	3
Chemical .....	7	4	4	4	4	7	7	7	8
Civil .....	25	15	15	16	17	30	33	33	35
Electrical .....	30	18	18	19	19	36	43	48	48
Engineering science .....	5	4	4	4	4	3	2	2	2
Industrial .....	26	14	15	15	17	27	31	32	34
Mechanical .....	18	14	15	17	16	25	26	28	28
Metallurgical/materials .....	5	4	5	5	5	5	6	7	7
Mining .....	3	3	4	4	4	4	4	4	4
Nuclear .....	0	0	0	0	0	0	0	0	0
Petroleum .....	1	1	2	2	2	2	2	2	2
Engineering, n.e.c. ....	27	15	16	14	15	25	26	29	31
Sciences, total .....	1,091	496	504	504	508	1,080	1,114	1,124	1,170
Physical sciences .....	142	67	67	70	69	136	135	136	140
Astronomy .....	0	0	0	0	0	0	0	0	0
Chemistry .....	90	43	43	44	43	87	88	88	89
Physics .....	42	18	18	18	18	38	34	35	37
Physical sciences, n.e.c. ....	10	6	6	8	8	11	13	13	14
Earth, atmospheric, & ocean sciences ..	52	26	26	26	27	55	56	55	61
Atmospheric sciences .....	1	1	1	1	1	1	1	1	1
Geosciences .....	28	11	11	12	13	33	33	33	37
Oceanography .....	4	3	3	3	4	5	6	6	6
Earth, atmos., & ocean sci., n.e.c. ..	19	11	11	10	9	16	16	15	17
Mathematical sciences .....	118	44	44	43	43	110	114	112	115
Computer sciences .....	45	28	32	35	35	75	80	83	88
Agricultural sciences .....	23	10	10	10	12	29	31	26	27
Biological sciences .....	204	91	93	88	89	190	193	189	191
Anatomy .....	0	0	0	0	0	0	0	0	0
Biochemistry .....	2	2	2	2	3	2	2	2	2
Biology .....	153	53	54	52	51	147	149	146	149
Biometry/epidemiology .....	0	0	0	0	0	0	0	0	0
Biophysics .....	0	0	0	0	0	0	0	0	0
Botany .....	6	6	6	5	4	4	4	4	4
Cell biology .....	0	0	0	0	0	0	0	0	0
Ecology .....	3	3	3	3	3	3	3	3	3
Entomology/parasitology .....	0	0	0	0	0	0	0	0	0
Genetics .....	1	1	1	1	1	1	1	1	1
Microbiology .....	5	5	5	5	5	4	4	3	3
Nutrition .....	13	7	8	8	8	13	13	13	13
Pathology .....	2	2	2	2	2	2	2	2	2
Pharmacology .....	1	1	1	1	1	1	1	1	1
Physiology .....	0	0	0	0	0	0	0	0	0
Zoology .....	7	5	5	3	4	3	3	3	2
Biosciences, n.e.c. ....	11	6	6	6	6	10	11	11	11
Psychology .....	190	66	66	69	70	197	211	224	233
Social sciences .....	317	164	166	163	163	288	294	299	315
Agricultural economics .....	3	3	3	3	2	2	2	2	2
Anthropology .....	13	12	12	11	11	11	11	12	12
Economics (except agricultural) .....	38	24	23	23	22	35	37	36	37
Geography .....	26	16	17	16	16	23	23	24	25
History and philosophy of science .....	0	0	0	0	0	0	0	0	0
Linguistics .....	4	4	5	5	5	6	6	5	7
Political science .....	119	52	52	53	53	112	115	114	118
Sociology .....	44	22	23	24	24	45	45	46	49
Sociology/anthropology .....	6	5	5	4	4	5	4	3	2
Social sciences, n.e.c. ....	64	26	26	24	26	49	51	57	63
Total, health fields .....	141	73	74	75	76	160	164	166	193
Anesthesiology .....	0	0	0	0	0	0	0	0	0
Oncology/cancer research .....	0	0	0	0	0	0	0	0	0
Cardiology .....	1	1	1	1	1	0	0	0	0
Dentistry .....	0	0	0	0	0	0	0	0	0
Endocrinology .....	0	0	0	0	0	0	0	0	0
Gastroenterology .....	0	0	0	0	0	0	0	0	0
Hematology .....	0	0	0	0	0	0	0	0	0
Neurology .....	1	1	1	1	1	1	1	1	1
Nursing .....	25	14	15	17	17	45	47	43	56
Obstetrics/gynecology .....	0	0	0	0	0	0	0	0	0
Ophthalmology .....	0	0	0	0	0	0	0	0	0
Otorhinolaryngology .....	0	0	0	0	0	0	0	0	0
Pediatrics .....	0	0	0	0	0	0	0	0	0
Pharmaceutical sciences .....	3	3	3	3	3	3	3	3	3
Preventive medicine/community health .....	6	4	4	4	4	5	5	5	7
Psychiatry .....	0	0	0	0	0	0	0	0	0
Pulmonary disease .....	0	0	0	0	0	0	0	0	0
Radiology .....	0	0	0	0	0	0	0	0	0
Speech pathology/audiology .....	51	22	23	22	22	50	52	56	61
Surgery .....	0	0	0	0	0	0	0	0	0
Veterinary sciences .....	1	1	1	1	1	1	1	1	1
Clinical medicine, n.e.c. ....	8	5	5	5	5	5	5	4	4
Health related, n.e.c. ....	45	22	21	21	22	50	50	53	60

1/ Number of departments in sampled institutions

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



data items. Each survey package also included (1) a flier explaining NSF's academic S&E surveys; (2) a computer-generated List of Departments or Programs (NSF Form 811) specific to each institution surveyed, based on the departments known to exist in the previous survey cycle; (3) a "Crosswalk" showing the National Center for Education Statistics (NCES) instructional program codes corresponding to each S&E field as defined by NSF; (4) a flow chart for use by institutions using computerized records to compile their submissions; and (5) a postcard acknowledging receipt of the survey and requesting the respondent to indicate changes in coordinator name, address, or telephone number.

### Survey Methodology

The survey packages were mailed out by November 15, 1991. The final survey universe consisted of 729 responding units at 609 institutions.

The acknowledgment postcard requested that institutional coordinators indicate how the data were collected, whether the data were maintained centrally or collected from individual departments, and whether they were derived from a computerized database or hand-tabulated. Of the 729 responding schools surveyed, coordinators at 681 units, or 93 percent, provided this information. The responding coordinators indicated the following distribution of data sources:

Schools reporting data sources	N = 654	Percent=100.0
Computerized central records	58	8.0
Automated with departmental input	10	1.4
Hand-tabulated at institution level	46	6.3
Hand-tabulated at department level	178	24.4
Combination of sources	389	53.4

This pattern is similar to that for 1990. This year the number of schools using computerized systems to assemble the requested data as well as those using automated systems with departmental input remained relatively the same as last year. The number of schools hand-tabulating data at the institution level decreased, however, and those hand-tabulating data at the department level or using a combination of data sources increased.

Institutional coordinators were asked to review the departmental listing provided on the Form 811 and to indicate any changes in their departmental structure such as departments newly formed, phased out, split, or merged, and to check off any departments that had neither graduate students nor postdoctorates and for which Form 812s would therefore not be submitted. The revised Form 811s were returned to the data processing contractor for use as a checklist in tracking departmental responses.

A Form 812 was completed for each department, either centrally or at the departmental level, and returned to the data processing contractor for data entry, editing, and tabulation. Arithmetic errors, inconsistencies between items, and sharp year-to-year fluctuations were referred to the institutional coordinators for correction or clarification.

## The Response Rate

Of the 729 responding entities included in the fall 1991 survey, 720, or 98.8 percent, were able to provide at least partial data, distributed as follows:

Highest degree granted	Number surveyed	Number responding	Percent responding
Total	729	720	98.8
Doctorate	453	451	99.6
Master's	276	269	97.5

At the departmental level, 10,239 departments responded, or 95.6 percent of the 10,705 departments surveyed. This includes 9,053 departments providing complete responses, or 84.6 percent of the total. 467 departments, or 4.4 percent of the departmental total, required complete imputation, and 1,186 or 11.1 percent had one or more data cells imputed. Table II-4 presents the response rates for earlier years for comparison.

Missing data for partially nonrespondent departments were imputed using the departments' previous year's data, where available, or data from peer institutions in cases where data had not been reported the previous year. Data for nonrespondent departments (departments that did not provide any data) were imputed using data from the previous year, where available. For seven nonrespondent departments that were new to the survey, data could not be imputed. The number of departments in doctorate- and master's-granting institutions that required total or partial imputation and the numbers and proportions of full- and part-time graduate students and postdoctorates imputed are shown in Tables II-5 through II-8. In 1991, imputation rates for master's-granting institutions were slightly higher than those for doctorate-granting institutions.

## Changes in Data Items

Although NSF has attempted to maintain consistent trend data, some modifications in the survey questionnaire have been made to respond to changing issues over the past 15 years. As a result, some data items are not available for all institutions in all years.

Whenever a new item has been added to the questionnaire, it has been NSF's standard policy to allow the respondents one year's lead time to convert their data collection systems before incorporating the new data into the survey; the question is labeled "optional" in the first year. Thus, while information on racial/ethnic background was first added to the survey form in 1979, publishable data were first obtained in 1980. Major changes in the data collected are as follows:

- From 1975 through 1977, data for master's-granting institutions were collected on a short form (i.e., an abbreviated form of the survey) that did not collect data on sex or citizenship of graduate students, nor any data on postdoctoral appointees. In 1978, a similar questionnaire was sent to doctorate-granting institutions, but master's granting institutions were not surveyed. The 1978 figures shown in the tables for master's granting institutions represent estimates based on 1977 and 1979 data. Beginning in 1979, the long form (i.e., the full-scale survey form) was sent to both doctorate- and master's-granting institutions.

Table 11-4. Departmental response rates: 1975-91

Year	Total	Complete response	Percent	Partial response	Percent	Non-response	Percent
1975 .....	9,162	8,998	98.2	NA	NA	NA	NA
1976 .....	9,275	9,148	98.6	NA	NA	NA	NA
1977 .....	9,513	9,432	99.1	NA	NA	NA	NA
1978 .....	8,242	8,077	98.0	NA	NA	NA	NA
1979 .....	9,796	9,446	96.4	NA	NA	NA	NA
1980 .....	9,930	9,593	96.6	NA	NA	NA	NA
1981 .....	9,917	8,594	86.7	613	6.2	710	7.2
1982 .....	9,776	8,104	82.9	744	7.6	928	9.5
1983 .....	9,663	8,070	83.5	816	8.4	777	8.0
1984 .....	8,748	7,490	85.6	643	7.4	615	7.0
1985 .....	9,025	7,818	86.6	672	7.4	535	5.9
1986 .....	9,097	7,817	85.9	779	8.6	501	5.5
1987 .....	9,254	8,030	86.8	715	7.7	509	5.5
1988 .....	10,295	8,812	85.6	970	9.4	513	5.0
1989 .....	10,318	8,908	86.3	891	8.6	519	5.0
1990 .....	10,483	8,884	84.7	1053	10.1	546	5.2
1991 .....	10,705	8,600	80.3	1645	15.4	460	4.3

NOTE: Departments providing partial responses were tabulated separately from complete nonrespondents beginning in 1981.

KEY: NA = not available

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 11-5. Imputation for nonresponse at doctorate-granting institutions by area of science and engineering and enrollment status: 1991

Area of science and engineering	Number of graduate departments		Total in survey			Number imputed			Imputation rate (percent)		
	In universe	Totally imputed	Full time	Part time	Postdoc-torates	Full time	Part time	Postdoc-torates	Full time	Part time	Postdoc-torates
Total, all areas .....	9,138	377	286,756	124,540	31,553	10,924	5,411	1,485	3.8	4.3	4.7
Engineering .....	1,260	38	68,925	36,167	2,237	2,207	801	127	3.2	2.2	5.7
Physical sciences .....	544	16	29,364	3,574	5,623	695	150	102	2.4	4.2	1.8
Earth, atmospheric, and ocean sciences .....	321	7	9,880	3,344	645	297	180	20	3.0	5.4	3.1
Mathematical sciences .....	358	10	13,525	4,001	206	235	137	7	1.7	3.4	3.4
Computer sciences .....	234	7	14,583	13,110	157	573	658	10	3.9	5.0	6.4
Agricultural sciences .....	300	11	8,793	1,954	574	215	74	14	2.4	3.8	2.4
Biological sciences .....	1,862	70	41,282	6,811	12,648	1,722	470	383	4.2	6.9	3.0
Psychology .....	477	30	26,052	10,306	503	1,311	429	9	5.0	4.2	1.8
Social sciences .....	1,217	43	47,080	21,972	425	2,045	876	3	4.3	4.0	0.7
Health fields .....	2,565	145	27,272	23,301	8,535	1,624	1,636	810	6.0	7.0	9.5

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table II-6. Imputed data for all departments  
at doctorate-granting institutions: fall 1991

Number of departments: 1,279 (Totally imputed departments: 377)

5. FULL-TIME GRADUATE S/E STUDENTS	Students receiving financial assistance									Self support (includ. loans & family sources)	Total for all sources (sum of columns A - I)
	Federal sources (excluding loans)						Non-Federal sources				
	DOD (A)	HHS		NSF (D)	Dept. of Agr. (E)	Other Federal sources (F)	Inst. support (G)	Foreign sources (H)	Other U.S. sources (I)		
		NIH (B)	Other HHS (C)								
Graduate fellowships (1)	39	61	19	61	5	171	1,447	264	272		2,286
Graduate traineeships (2)	13	350	302	4	4	88	520	18	78		1,377
Graduate research assistants (3)	549	861	79	856	150	746	2,602	64	762		5,799
Graduate teaching assistants (4)		4	4	5	0	40	6,404		93		5,560
Other types of support (5)	668	31	12	8	15	89	1,436	238	539	10,522	12,698
FULL TIME TOTAL (6)	1,269	1,307	416	934	174	1,134	12,029	584	1,744	10,522	10,964
Full time women (7)	85	754	369	186	60	429	5,557	104	550	5,627	6,050
Full time first year total (8)											5,830
Full time first year women (9)											2,496
6. PART-TIME GRADUATE S/E STUDENTS											
Total (1)	5,462										
Women (2)	3,822										
7. RACIAL/ETHNIC BACKGROUND OF GRADUATE S/E STUDENTS	U.S. citizens only							Foreign (G)	Total (sum of columns A - G)		
	Black non- Hispanic (A)	American Indian/ Alaskan (B)	Asian/ Pacific Islander (C)	Hispanic (D)	White non- Hispanic (E)	Other or unknown (F)					
Full-time (1)	564	18	620	958	9,327	1,275	5,263	10,964			
Part-time (2)	512	45	562	435	7,140	1,426	1,076	5,462			
8. S/E POSTDOCTORATES AND NONFACULTY DOCTORAL RESEARCH STAFF	Postdoctorates						Other non-fac. doctoral research staff (G)				
	Source of support				Total for all sources (A - D) (E)	Foreign postdoc- torates (F)					
	Federal			Non- Federal (D)							
	Fellow- ships (A)	Trainee- ships (B)	Research grants (C)								
	Total (1)	357	400	1,597	1,069	2,320					
Women (2)	98	135	373	293	720	619	131				
With MD, DDS, or DVM degrees (3)	183	177	189	413	885	476	52				

Source: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 11-7. Imputation for nonresponse at master's-granting institutions by area of science and engineering and enrollment status: 1991

Area of science and engineering	Number of graduate departments		Total in survey			Number imputed			Imputation rate (percent)		
	In universe	Totally imputed	Full time	Part time	Postdoc- torates	Full time	Part time	Postdoc- torates	Full time	Part time	Postdoc- torates
Total, all areas .....	1,567	83	21,913	42,482	92	1,557	3,068	0	7.1	7.2	0.0
Engineering .....	204	20	2,305	7,010	12	315	799	0	13.7	11.4	0.0
Physical sciences .....	140	4	767	1,195	44	13	30	0	1.7	2.5	0.0
Earth, atmospheric, and ocean sciences .....	61	3	534	989	2	23	100	0	4.3	10.1	0.0
Mathematical sciences .....	115	5	734	1,732	0	17	74	0	2.3	4.3	0.0
Computer sciences .....	88	7	1,969	5,066	0	186	510	0	9.4	10.1	0.0
Agricultural sciences .....	27	0	1,445	2,283	0	0	0	0	0.0	0.0	0.0
Biological sciences .....	191	7	1,647	2,380	22	91	82	0	5.5	3.4	0.0
Psychology .....	233	11	6,330	8,904	10	438	620	0	6.9	7.0	0.0
Social sciences .....	315	18	3,683	8,544	0	305	522	0	8.3	6.1	0.0
Health fields .....	193	8	3,499	6,379	2	169	331	0	4.8	5.2	0.0

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 11-8. Imputed data for all departments  
at master's-granting institutions: fall 1991

Number of departments: 366 (Totally imputed departments: 83)

5. FULL-TIME GRADUATE S/E STUDENTS		Students receiving financial assistance								Self support (includ. loans & family sources) (J)	Total for all sources (sum of columns A - I) (K)	
		Federal sources (excluding loans)						Non-Federal sources				
		DOD (A)	HHS		NSF (D)	Dept. of Agr. (E)	Other Federal sources (F)	Inst. support (G)	Foreign sources (H)			Other U.S. sources (I)
			NIH (B)	Other HHS (C)								
Graduate fellowships (1)		0	0	0	0	0	3	44	4	8		59
Graduate traineeships (2)		1	3	17	1	0	0	14	0	6		42
Graduate research assistants (3)		1	9	0	5	12	59	206	3	6		301
Graduate teaching assistants (4)			2	0	0	0	7	436		1		443
Other types of support (5)		1	0	0	2	0	39	80	44	64	3,262	3,114
FULL-TIME TOTAL (6)		3	14	17	8	12	108	778	51	85	3,262	1,557
Full-time women (7)		0	10	13	3	3	44	398	12	28	1,641	1,186
Full-time first-year total (8)												1,237
Full-time first-year women (9)												707
6. PART-TIME GRADUATE S/E STUDENTS												
Total (1)		3,068										
Women (2)		2,146										
7. RACIAL/ETHNIC BACKGROUND OF GRADUATE S/E STUDENTS		U.S. citizens only							Total (sum of columns A - G) (H)			
		Black non- Hispanic (A)	American Indian/ Alaskan (B)	Asian/ Pacific Islander (C)	Hispanic (D)	White non- Hispanic (E)	Other or unknown (F)					
									Foreign (G)			
Full-time (1)		160	12	122	97	1,753	462	673	1,557			
Part-time (2)		286	6	262	109	4,168	1,026	336	3,068			
8. S/E POSTDOCTORATES AND NONFACULTY DOCTORAL RESEARCH STAFF		Postdoctorates							Other non-fac. doctoral research staff (G)			
		Source of support				Total for all sources (A + D) (E)	Foreign postdoc- torates (F)					
		Federal			Non- Federal (D)							
		Fellow- ships (A)	Trainee- ships (B)	Research grants (C)								
		Total (1)		0	0	3	9	12	9	5		
Women (2)		0	0	0	1	1	1	0				
With MD, DDS, or DVM degrees (3)		0	0	0	0	0	0	0				

Source: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



- Distribution by sex was originally requested only for full-time graduate students at doctorate-granting institutions. Beginning in 1976, master's-granting institutions were requested to provide data on all graduate students by sex, and in 1977 similar data were requested for all graduate students in all institutions. The short form used in the 1978 survey did not request any information on sex; figures in the tables represent estimates based on 1977 and 1979 data.
- Citizenship data were collected only for graduate students enrolled full-time in doctorate-granting institutions through 1977. No citizenship data were requested on the short form used for master's-granting institutions in 1975 through 1977 and for doctorate-granting institutions in 1978. Data on citizenship of all full-time graduate students are available beginning in 1979 and on those enrolled part-time since 1983.
- As noted above, racial/ethnic data were first requested in 1979 and became a standard item on the questionnaire in 1980. However, imputation rates for this item are still higher than for other data on the questionnaire, as shown in Tables II-6 and II-8.
- "Fellowships and traineeships" were combined on one line until 1979, when separate data on the two mechanisms were first collected.
- "Other nonfaculty research staff with doctorates" were combined with postdoctoral appointees until 1979.
- Separate data on students receiving their primary support from the U.S. Department of Agriculture were first requested in 1985.

### **Data Revisions**

During the fall 1988 survey cycle, the criteria for including departments in the survey universe were tightened, and all departments surveyed were reviewed. Those departments not primarily oriented toward granting research degrees were no longer considered to meet the definition of science and engineering. As a result of this review, it was determined that a number of departments, primarily in the field of "Social sciences, n.e.c." (not elsewhere classified), were primarily engaged in training teachers, practitioners, administrators, or managers rather than researchers; these departments were deleted from the database. This process was continued during the fall 1989, 1990, and 1991 survey cycles, and expanded to ensure trend consistency for the entire 1975-91 period. As a result, total enrollments and social science enrollments for all years were reduced. The net effect of adjustments over the years is shown in Table II-9.

Table II-9. Comparison of graduate enrollment data as originally published and as modified through the fall of 1991 graduate student survey cycle: 1975-91

Year	Total, all institutions			Doctorate-granting institutions			Master's-granting institutions		
	Original total	Revised total	Percent change	Original total	Revised total	Percent change	Original total	Revised total	Percent change
Total graduate enrollment in surveyed fields									
1975 1/	336,843	329,202	-2.3	290,662	291,632	0.3	46,181	37,750	-18.3
1976	345,979	334,383	-3.4	297,280	295,138	-0.7	48,699	39,245	-19.4
1977	362,978	345,962	-4.7	306,710	302,277	-1.4	56,268	43,685	-22.4
1978 2/	NA	345,187	NA	311,982	298,788	-4.2	NA	45,216	NA
1979	375,267	358,844	-4.4	321,770	311,527	-3.2	53,497	47,317	-11.6
1980	383,210	368,390	-3.9	333,658	321,188	-3.7	49,552	47,202	-4.7
1981	392,034	376,533	-4.0	340,203	327,904	-3.6	51,831	48,629	-6.2
1982	399,682	383,549	-4.0	347,414	334,570	-3.7	52,268	48,979	-6.3
1983	413,564	392,376	-5.1	358,276	341,360	-4.7	55,288	51,016	-7.7
1984 3/	415,064	396,449	-4.5	363,470	344,655	-5.2	51,594	51,794	0.4
1985 3/	434,836	405,432	-6.8	371,052	353,696	-4.7	63,784	51,736	-18.9
1986 3/	446,102	416,442	-6.6	384,203	364,234	-5.2	61,899	52,208	-15.7
1987 3/	449,585	421,441	-6.3	388,681	368,358	-5.2	60,904	53,083	-12.8
1988	445,595	425,752	-4.5	391,683	373,909	-4.5	53,912	51,843	-3.8
1989	440,983	434,861	-1.4	385,025	379,521	-1.4	55,958	55,340	-1.1
1990	458,943	444,346	-3.2	398,405	384,911	-3.4	60,538	59,435	-1.8
1991	475,691	N/A	N/A	411,296	N/A	N/A	64,395	N/A	N/A
Full Time									
1975 1/	228,316	220,123	-3.6	210,641	206,512	-2.0	17,675	13,611	-23.0
1976	233,748	223,855	-4.2	215,355	209,856	-2.6	18,393	13,999	-23.9
1977	238,202	227,187	-4.6	218,226	211,822	-2.9	19,976	15,365	-23.1
1978 2/	NA	225,072	NA	217,588	208,636	-4.1	NA	15,692	NA
1979	243,331	232,376	-4.5	224,057	215,955	-3.6	19,274	16,421	-14.8
1980	249,111	238,868	-4.1	230,601	221,912	-3.8	18,510	16,956	-8.4
1981	253,428	242,777	-4.2	234,529	225,910	-3.7	18,899	16,867	-10.8
1982	255,959	245,378	-4.1	237,676	229,114	-3.6	18,283	16,264	-11.0
1983	263,800	252,846	-4.2	243,646	235,166	-3.5	20,154	17,680	-12.3
1984 3/	264,146	254,735	-3.6	246,848	236,554	-4.2	17,298	18,181	5.1
1985 3/	269,319	258,241	-4.1	249,666	240,386	-3.7	19,653	17,855	-9.1
1986 3/	279,235	267,075	-4.4	259,980	249,098	-4.2	19,255	17,977	-6.6
1987 3/	285,200	271,772	-4.7	264,862	253,187	-4.4	20,338	18,585	-8.6
1988	288,619	276,225	-4.3	268,385	258,318	-3.8	20,234	17,907	-11.5
1989	286,619	283,849	-1.0	267,554	265,188	-0.9	19,065	18,661	-2.1
1990	295,836	288,981	-2.3	275,262	268,864	-2.3	20,574	20,117	-2.2
1991	308,669	N/A	N/A	286,756	N/A	N/A	21,913	N/A	N/A
Part Time									
1975 1/	108,527	109,079	0.5	80,021	85,120	6.4	28,506	23,959	-16.0
1976	112,231	110,528	-1.5	81,925	85,282	4.1	30,306	25,246	-16.7
1977	124,776	118,775	-4.8	88,484	90,455	2.2	36,292	28,320	-22.0
1978 2/	NA	120,115	NA	94,394	90,152	-4.5	NA	29,524	NA
1979	131,936	126,468	-4.1	97,713	95,572	-2.2	34,223	30,896	-13.7
1980	134,099	129,522	-3.4	103,057	99,276	-3.7	31,042	30,246	-2.6
1981	138,606	133,756	-3.5	105,674	101,994	-3.5	32,932	31,762	-3.6
1982	143,723	138,171	-3.9	109,738	105,456	-3.9	33,985	32,715	-3.7
1983	149,764	139,530	-6.8	114,630	106,194	-7.4	35,134	33,336	-5.1
1984 3/	150,918	141,714	-6.1	116,622	108,101	-7.3	34,296	33,613	-2.0
1985 3/	165,517	147,191	-11.1	121,386	113,310	-6.7	44,131	33,881	-23.2
1986 3/	166,867	149,367	-10.5	124,223	115,136	-7.3	42,644	34,231	-19.7
1987 3/	164,385	149,669	-9.0	123,819	115,171	-7.0	40,566	34,498	-15.0
1988	156,976	149,527	-4.7	123,298	115,591	-6.3	33,678	33,936	0.8
1989	154,364	151,012	-2.2	117,471	114,333	-2.7	36,893	36,679	-0.6
1990	163,107	155,365	-4.7	123,143	116,047	-5.8	39,964	39,318	-1.6
1991	167,022	N/A	N/A	124,540	N/A	N/A	42,482	N/A	N/A

1/ The 1976 survey collected data 1975 data from master's-granting institutions.

2/ Master's-granting institutions were not surveyed in 1978.

3/ Includes estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See Technical Notes for further information.

KEY: NA = not available  
N/A = not applicable

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

BEST COPY AVAILABLE

3.50

## Section III.

---

# List of Institutions Included in the Fall 1991 Survey

The graduate institutions included in the 1991 survey are listed in alphabetical order by State in Tables III-1 and III-2. Table III-1 lists all doctorate-granting institutions in the universe and their separately reported components, with their institutional codes as assigned by the Federal Interagency Committee on Education (FICE). Table III-2 contains the same information for all master's-granting institutions in the survey universe. Institutional FICE codes are provided for the convenience of those wishing to request Institutional Profiles (see General Notes, p. ix), for their own or selected peer institutions. These profiles are available only at the institutional level, however; separate profiles are not available for individual components or branch campuses within an institution.

Table III-1. Doctorate-granting institutions in the fall 1991 survey

FICE CODE		FICE CODE	
	Alabama		Delaware
008695	L Auburn University Graduate School (Main Campus) Graduate School at Montgomery	001431	L University of Delaware
001051	The University of Alabama		District of Columbia
001052	The University of Alabama at Birmingham Graduate School School of Medicine	001437	Catholic University of America
001055	The University of Alabama in Huntsville	001444	George Washington University Graduate School School of Medicine and Health Sciences
001057	University of South Alabama College of Medicine Graduate School	001445	Georgetown University Graduate School School of Medicine
	Alaska	001448 H	Howard University College of Medicine Graduate School
029094	L University of Alaska at Fairbanks	001434	The American University
	Arizona		Florida
001081	Arizona State University	001480 H L	Florida A & M University
001082	Northern Arizona University	001481	Florida Atlantic University
001083	L University of Arizona College of Medicine Graduate School	001469	Florida Institute of Technology
	Arkansas	009635	Florida International University
001108	L University of Arkansas	001489	L Florida State University
001109	University of Arkansas - Med Sci Campus	001509	Nova University
	California	003954	University of Central Florida
001122	Biola University	001535	University of Florida College of Medicine College of Nursing Graduate School
011881	Calif Sch of Prof Psych - Fresno	001536	University of Miami Graduate School School of Medicine
010013	Calif Sch of Prof Psych - Los Angeles	001537	University of South Florida College of Medicine Graduate School
011117	Calif Sch of Prof Psych - San Diego		Georgia
009844	Calif Sch of Prof Psych-Berkeley/Alameda	001559 H	Clark Atlanta University
012154	California Institute of Integral Studies	001564	Emory University Graduate School School of Medicine
001131	California Institute of Technology	008723	Georgia Institute of Technology
000166	Charles R. Drew Univ of Medicine & Sci	001574	Georgia State University
001169	Claremont Univ Center & Graduate School	005010	Institute of Paper Science & Technology
001200	Fuller Theological Seminary	001579	Medical College of Georgia
001205	Golden Gate University	008724	Mercer University Graduate School School of Medicine Southern School of Pharmacy
001218	Loma Linda University Graduate School School of Medicine	029297 H	Morehouse School of Medicine
029225	Pacific Grad School of Prof Psych	001598	L University of Georgia
010441	Rand Graduate School of Policy Studies		Hawaii
001151	San Diego State University	001610	L University of Hawaii at Manoa Graduate School John A. Burns School of Medicine
001326	Santa Clara University		Idaho
001305	Stanford University Graduate School School of Medicine	001620	Idaho State University
029092	The Fielding Institute	001626	L University of Idaho
008846	The Wright Institute		Illinois
001158	US International University	001657	Chicago Coll of Osteo Medicine
001310	US Naval Postgraduate School	029230	Chicago School of Prof Psych
001312	L University of Calif at Berkeley	001671	De Paul University
001313	L University of Calif at Davis	029239	Forest Institute of Prof Psych
001314	L University of Calif at Irvine College of Medicine Graduate School	001691	Illinois Institute of Technology
001315	L University of Calif at Los Angeles Graduate School School of Medicine	001692	Illinois State University
001316	L University of Calif at Riverside	001710	Loyola University of Chicago Grad Sch at the Medical Center Graduate School Stritch School of Medicine
001317	L University of Calif at San Diego Graduate School School of Medicine	001737	Northern Illinois University
001319	L University of Calif at San Francisco	001739	Northwestern University Graduate School Medical School
001320	L University of Calif at Santa Barbara	009800	Rush University
001321	L University of Calif at Santa Cruz	001758	Southern Illinois Univ at Carbondale
001328	University of Southern California Graduate School School of Medicine	001774	University of Chicago Graduate School Pritzker School of Medicine
001329	University of the Pacific	001659	University of Health Sciences (Chicago)
	Colorado	001776	L University of Illinois at Chicago
001348	Colorado School of Mines	001775	L University of Illinois at Urbana
001350	L Colorado State University		Indiana
008717	University of Colorado Graduate School at Boulder Graduate School at Colorado Springs Graduate School at Denver School of Medicine	001786	Ball State University
001371	University of Denver	001807	Indiana State University
001349	University of Northern Colorado	008731	Indiana University Fort Wayne Campus Graduate School-Bloomington Indiana University-Purdue University School of Dentistry School of Medicine
	Connecticut	008732	L Purdue University
008718	University of Connecticut Graduate School School of Medicine		
001424	Wesleyan University		
001426	Yale University Graduate School School of Medicine School of Nursing		

Table III-1. Doctorate-granting institutions in the fall 1991 survey

FICE CODE		FICE CODE	
	Indiana, continued		Michigan
001840	Graduate School University of Notre Dame	002238	Andrews University
	Iowa	002243	Central Michigan University
001869	L Iowa State University of Sci & Tech	002290	L Michigan State University
011113	Maharishi International University	002292	Michigan Technological University
001855	Univ. of Osteopathic Med & Health Sci	002307	Oakland University
001892	University of Iowa College of Medicine	002323	University of Detroit
	Graduate School	009091	University of Michigan Graduate School at Ann Arbor
001890	University of Northern Iowa	002329	Graduate School at Dearborn Medical School at Ann Arbor
	Kansas		Wayne State University Graduate School
001928	L Kansas State University	002330	School of Medicine Western Michigan University
029001	University of Kansas Graduate School		Minnesota
001950	Wichita State University Medical Center	010337	Mayo Graduate School
	Kentucky	008761	L University of Minnesota Duluth School of Medicine
001960	Spalding University		Graduate School at Duluth
008744	L University of Kentucky College of Medicine		Graduate School at Minneapolis
	Graduate School		Minneapolis Medical School
001999	University of Louisville Graduate School	002423	L Mississippi State University
	School of Medicine	008764	University of Mississippi Graduate School
	Louisiana	002441	School of Medicine University of Southern Mississippi
008745	L Louisiana State University System Graduate School - Univ of New Orleans		Missouri
	Medical Center at New Orleans	002477	Kirkville College of Osteopathic Med
	School of Medicine in Shreveport	008766	St. Louis University Graduate School
002008	The Graduate School in Baton Rouge		School of Medicine
002020	Louisiana Tech University	002474	Univ of Health Sciences (Kansas City)
002029	Northeast Louisiana University	002516	L University of Missouri - Columbia Graduate School
	Tulane University of Louisiana Graduate School		School of Medicine
	School of Medicine	002518	L University of Missouri - Kansas City
002031	School of Public Health & Tropical Med	002517	L University of Missouri - Rolla
002032 H	University of Southwestern Louisiana	002519	L University of Missouri - St Louis
	Xavier University	002520	Washington University Graduate School
	Maine		School of Medicine
002053	L University of Maine		Montana
002050	University of New England College of Arts and Sciences	002532	L Montana State University
	College of Osteopathic Medicine	002536	University of Montana
	Maryland		Nebraska
002077	Johns Hopkins University Graduate School	002542	Creighton University Graduate School
	School of Hygiene and Public Health		School of Medicine
029169	School of Medicine	002565	University of Nebraska - Lincoln
002104	Uniformed Serv Univ of the Hlth Sciences	006895	University of Nebraska Medical Center
002105	L University of Maryland - Balt Prof Sch		Nevada
002103	L University of Maryland - Baltimore Cnty	002568	L University of Nevada at Reno Graduate School
002106 H	L University of Maryland - College Park		School of Medical Sciences
	University of Maryland Eastern Shore		New Hampshire
	Massachusetts	002573	Dartmouth College Graduate School
002128	Boston College		School of Medicine
002130	Boston University Graduate School	002589	L University of New Hampshire
	School of Dentistry		New Jersey
	School of Medicine	008770	Fairleigh Dickinson University
002133	School of Public Health	002621	New Jersey Institute of Technology
002139	Brandeis University	002627	Princeton University
002146	Clark University	008771	L Rutgers the State University Graduate School at Camden
002155	Emerson College		Graduate School at New Brunswick
	Harvard University Graduate School of Arts & Sciences		Graduate School at Newark
	Harvard Medical School		School of Criminal Justice
	School of Public Health	002632	Seton Hall University
002165	Mass College of Pharmacy/Allied Health	002639	Stevens Institute of Technology
002178	L Massachusetts Institute of Technology	002620	Univ of Med and Dent of New Jersey Grad Sch of Biomed Sci/NJ Med School
002199	Northeastern University		NJ School of Osteopathic Med
002209	Smith College		New Jersey Dental School
002219	Tufts University Graduate School		New Jersey Medical School at Newark
	Sackler Sch of Grad Biomedical Sciences		Robt Wood Johnson Medical School
	School of Medicine		New Mexico
008755	School of Nutrition	002654	New Mexico Institute of Mining and Tech
	L University of Massachusetts	003773	L New Mexico State University
	Graduate School at Amherst	002663	University of New Mexico
	Graduate School at Boston		
	School of Medicine at Worcester		
002161	University of Massachusetts Lowell		
002230	Woods Hole Oceanographic Institution		
002233	Worcester Polytechnic Institute		



Table III-1. Doctorate-granting institutions in the fall 1991 survey

FICE CODE		FICE CODE	
	New York		Ohio, continued
002666	Adelphi University	010923	Union Institute
002887	Albany Medical College Grad Studies Pr	012310	University of Akron
002668	Alfred University	008805	University of Cincinnati
002688	CUNY City College		College of Medicine
004063	CUNY Graduate School and Univ Center		Graduate School
007022	CUNY Herbert H. Lehman College	003127	University of Dayton
002689	CUNY Hunter College	003131	University of Toledo
007026	CUNY Mt. Sinai Sch of Medicine	009167	Wright State University
002699	Clarkson University		
002707	Columbia University Main Division		Oklahoma
	College of Phys and Surgeons		
	Graduate School	008806	L Oklahoma State University
003979	Columbia University Teachers College	008807	University of Oklahoma
008779	L Cornell University		Graduate College
	Graduate School		Health Sciences Center
	Graduate School of Medical Sciences	003185	University of Tulsa
	Medical College		
002722	Fordham University		Oregon
002732	Hofstra University		
008780	Long Island University	008856	Oregon Grad Inst of Science & Technology
	Brentwood Center	004882	Oregon Health Sciences University
	Brooklyn Center	003210	L Oregon State University
	C. W. Post Center	003216	Portland State University
	Rockland Campus	003223	University of Oregon
	Westchester Center		
002780	New School for Social Research		Pennsylvania
008782	New York Institute of Technology		
	New York College of Osteopathic Medicine	003237	Bryn Mawr College
		003242	Carnegie-Mellon University
002784	New York Medical College	003256	Drexel University
002785	New York University	003258	Duquesne University
	Graduate School	003271	Hahnemann University
	School of Medicine	008810	Indiana University of Pennsylvania
	Wagner Graduate School of Public Service	003289	Lehigh University
008784	Pace University	008813	L Pennsylvania State University
002796	Polytechnic University		College of Medicine
002803	Rensselaer Polytechnic Institute		Graduate School
002807	Rockefeller University	003352	Phila College of Osteopathic Medicine
002835	SUNY - Albany	003353	Philadelphia Coll of Pharmacy and Sci
002836	SUNY - Binghamton	003371	Temple University
009554	SUNY - Buffalo		Graduate School
	Graduate School		School of Medicine
	School of Medicine		School of Pharmacy
002851	SUNY - Coll of Env Science and Forestry	003398	The Medical College of Pennsylvania
002839	SUNY - Health Sci Ctr at Brooklyn	003278	Thomas Jefferson University
002840	SUNY - Health Sci Ctr at Syracuse	003378	University of Pennsylvania
009555	SUNY - Stony Brook		Graduate School
	Graduate School		School of Medicine
	School of Medicine	008815	University of Pittsburgh
009929	SUNY State College of Optometry		Graduate School
002823	St John's University		School of Medicine
008789	Syracuse University	003388	Villanova University
002889	Union College(NY)		
002894	University of Rochester		Rhode Island
	Graduate School		
	School of Medicine and Dentistry	003401	Brown University
002903	Yeshiva University	003406	Providence College
	Albert Einstein College of Medicine	003414	L University of Rhode Island
	Graduate School		
	North Carolina		South Carolina
002920	Duke University	003425	L Clemson University
	Graduate School	003438	Medical University of South Carolina
	School of Medicine	008819	University of South Carolina
002923	East Carolina University		Graduate School
	Graduate School		Medical School
	School of Medicine		
002972	L North Carolina State Univ at Raleigh		South Dakota
002974	Univ of North Carolina at Chapel Hill		
	Graduate School	003470	South Dakota School of Mines and Tech
	School of Medicine	003471	L South Dakota State University
002976	Univ of North Carolina at Greensboro	003474	University of South Dakota
002978	Wake Forest University		Graduate School
	Bowman Gray School of Medicine		School of Medicine
	Graduate School		
	North Dakota		Tennessee
009266	L North Dakota State University	003487	East Tennessee State University
008794	University of North Dakota	003506	Meharry Medical College
		003509	Memphis State University
		003523	Tennessee Technological University
		003530	L University of Tennessee at Knoxville
		006725	L University of Tennessee, Memphis
		003535	Vanderbilt University
003009	Air Force Institute of Technology		Graduate School
008795	Antioch University		School of Medicine
008796	Bowling Green State University		
003024	Case Western Reserve University		Texas
	Graduate School		
	School of Medicine	004948	Baylor College of Dentistry
003032	Cleveland State University	004949	Baylor College of Medicine
008799	Kent State University	006967	Baylor University
007737	Medical College of Ohio at Toledo	003565	East Texas State University
008800	Miami University	003581	Lamar University
029045	NE Ohio Univ Med School	003604	Rice University
008802	L Ohio State University	003606	Sam Houston State University
	College of Medicine	003613	Southern Methodist University
	Graduate School	003624	Stephen F. Austin State University
008803	Ohio University	003632	L Texas A & M University
	College of Osteopathic Medicine	003636	Texas Christian University
	Graduate College	009768	Texas College of Osteopathic Medicine



Table III-1. Doctorate-granting institutions in the fall 1991 survey

FICE CODE		FICE CODE	
	Texas, continued		Washington
003644	Texas Tech University	003798	University of Washington
	Graduate School		Graduate School
	Health Sciences Center		School of Medicine
003646	Texas Woman's University	003800	L Washington State University
003659	Univ of Texas Hlth Sci Ctr San Antonio		West Virginia
011618	Univ of Texas Hlth Sci Ctr at Houston		
003657	Univ of Texas MD Anderson Cancer Center	003815	Marshall University
004952	Univ of Texas Med Branch at Galveston		Graduate School
003660	Univ of Texas SW Medical Ctr at Dallas		School of Medicine
003656	Univ of Texas at Arlington	011245	West Virginia Sch of Osteopathic Med
003658	Univ of Texas at Austin	003827	L West Virginia University
009741	Univ of Texas at Dallas		Graduate School
003661	Univ of Texas at El Paso		School of Medicine
003652	University of Houston-University Park		Wisconsin
003594	University of North Texas		
	Utah		
012305	Brigham Young University	003863	Marquette University
003675	University of Utah	008296	Medical College of Wisconsin
	Graduate School	003895	L University of Wisconsin - Madison
	School of Medicine		Graduate School
003677	L Utah State University		Medical School
	Vermont	003896	University of Wisconsin - Milwaukee
			Wyoming
003696	L University of Vermont & St Agric College	003932	L University of Wyoming
	College of Medicine		OUTLYING AREAS
	Graduate School		
	Virginia		Puerto Rico
008828	College of William and Mary		
010338	Eastern Virginia Medical School	029063	Caribbean Center for Advanced Studies
003749	George Mason University	003936	Catholic University of Puerto Rico
003717	Institute of Textile Technology	029268	Ponce School of Medicine
003728	Old Dominion University	003944	L University of Puerto Rico
003745	University of Virginia	007108	L University of Puerto Rico - Rio Piedras
	Graduate School	003945	L University of Puerto Rico Med Sci Campus
	School of Medicine		
003735	Virginia Commonwealth University		
	Graduate School		
	Medical College of Virginia		
003754	L Virginia Polytechnic Inst and State Univ		

KEY: H = Historically Black institution  
L = Land Grant institution

Table III-2. Master's-granting institutions in the fall 1991 survey

FIGE CODE		FIGE CODE	
	Alabama		Illinois
001002 H L	Alabama A & M University	001641	Bradley University
001005 H	Alabama State University	001694	Chicago State University
001020	Jacksonville State University	001674	Eastern Illinois University
001049	Troy State University in Montgomery	009145	Governors State University
001050 H	Tuskegee University	001693	Northeastern Illinois University
001004	University of Montevallo	001749	Roosevelt University
	Alaska	009333	Sangamon State University
029096	University of Alaska Southeast	001759	Southern Illinois Univ at Edwardsville
029095	University of Alaska at Anchorage	001780	Western Illinois University
	Arkansas		Indiana
008701	Arkansas State University	001788	Butler University
001101	University of Arkansas at Little Rock	001822	Indiana Wesleyan University
001092	University of Central Arkansas	001830	Rose-Hulman Institute of Technology
	California	001832	Saint Francis College
001117	Azusa Pacific University	001795	University of Evansville
001143	Calif Poly State Univ at San Luis Obispo	001842	Valparaiso University
001144	Calif State Polytechnic Univ at Pomona		Iowa
001141	Calif State Univ at Dominguez Hills	001860	Drake University
001137	Calif State Univ at Fullerton	001873	Loras College
001138	Calif State Univ at Hayward	001876	Teikyo Marycrest College
001139	Calif State Univ at Long Beach		Kansas
001140	Calif State Univ at Los Angeles	001927	Emporia State University - Kansas
001142	Calif State Univ at San Bernardino	001915	Fort Hays State University
001157	Calif State Univ of Stanislaus	001926	Pittsburg State University
001146	Calif State University at Chico	001949	Washburn University of Topeka
001147	Calif State University at Fresno		Kentucky
001153	Calif State University at Northridge	001963	Eastern Kentucky University
001150	Calif State University at Sacramento	001976	Morehead State University
007993	California State Univ - Bakersfield	001977	Murray State University
001164	Chapman University	002002	Western Kentucky University
001196	Dominican College of San Rafael		Louisiana
001171	Harvey Mudd College	002006 H	Grambling State University
001149	Humboldt State University	002016	Loyola University in New Orleans
004484	John F Kennedy University	002017	McNeese State University
011649	Loyola Marymount University	002005	Nicholls State University
011460	National University	002021	Northwest State University
001249	Occidental College	002024	Southeastern Louisiana University
001257	Pacific States University	002025 H L	Southern University A & M College
001264	Pepperdine University		Maryland
001154	San Francisco State University	002068 H	Coppin State College
001155	San Jose State University	002072	Frostburg State University
001156	Sonoma State University	002076	Hood College
001216	University of La Verne	002078	Loyola College
001322	University of Redlands	002083 H	Morgan State University
010395	University of San Diego	002099	Towson State University
001325	University of San Francisco	002102	University of Baltimore
008716	West Coast University	002108	Washington College
	Colorado		Massachusetts
023562	National Technological University	002114	American International College
	Connecticut	002117	Anna Maria College
001378	Central Connecticut State University	002118	Assumption College
001379	Connecticut College	002183	Bridgewater State College
001402	Quinnipiac College	002185	Framingham State College
001406	Southern Connecticut State University	029365	MGH Institute of Health Professions
001409	St. Joseph College	002192	Mount Holyoke College
002804	The Hartford Graduate Center	002188	Salem State College
001414	Trinity College	002210	University of Massachusetts Dartmouth
001416	University of Bridgeport	002226	Western New England College
001422	University of Hartford	002229	Williams College
001397	University of New Haven	002190	Worcester State College
001380	Western Connecticut State University		Michigan
	Delaware	002259	Eastern Michigan University
001428 H L	Delaware State College	002268	Grand Valley State University
	District of Columbia	002301	Northern Michigan University
001443	Gallaudet University		Minnesota
029100 H L	University of the District of Columbia	002336	Bemidji State University
	Florida	002360	Mankato State University
001495	Jacksonville University	002367	Moorhead State University
003955	University of West Florida	002380	St Mary's College of Minnesota
	Georgia	002377	St. Cloud State University
001552	Augusta College		Mississippi
001566 H L	Fort Valley State College	002410 H	Jackson State University
001602	Georgia College	002422	Mississippi University for Women
001572	Georgia Southern University		
001599	Valdosta State College		
001601	West Georgia College		

Table III-2. Master's-granting institutions in the fall 1991 survey

FICE CODE		FICE CODE	
	Missouri		Pennsylvania
002454	Central Missouri State University	003315	Bloomsburg University of Pennsylvania
002479 H L	Lincoln University	003238	Bucknell University
002495	Northeast Missouri State University	003316	California University of Pennsylvania
002496	Northwest Missouri State University	009234	Clarion University of Pennsylvania
002501	Southeast Missouri State University	003320	East Stroudsburg Univ. of Pennsylvania
002503	Southwest Missouri State University	003321	Edinboro University of Pennsylvania
	Montana	003266	Gannon University
002531	Montana College Mineral Sci & Technology	003322	Kutztown University of Pennsylvania
	Nebraska	003324	Mansfield University of Pennsylvania
002551	Kearney State College	003296	Marywood College
002554 L	University of Nebraska - Omaha	003325	Millersville University of Pennsylvania
	Nevada	003326	Shippensburg University of Pennsylvania
002569	University of Nevada at Las Vegas	003327	Slippery Rock University of Pennsylvania
	New Hampshire	003367	St Joseph's University
002586	Rivier College	003370	Swarthmore College
	New Jersey	003384	University of Scranton
002603	Drew University	003328	West Chester University of Pennsylvania
002622	Kean College of New Jersey	003313	Widener University
002616	Mormouth College(NJ)	003394	Wilkes University
002617	Montclair State College		Rhode Island
002642	Trenton State College		Rhode Island College
002625	William Paterson College		South Carolina
	New Mexico	003428	College of Charleston
008772	Eastern New Mexico University	003434	Furman University
002653	New Mexico Highlands University	003456	Winthrop College
	New York		Tennessee
004766	CUNY Bernard Baruch College	003478	Austin Peay State University
002687	CUNY Brooklyn College	003490 H	Fisk University
029040	CUNY College of Staten Island St George	003510	Middle Tennessee State University
002693	CUNY John Jay College of Crim Justice	003522 H L	Tennessee State University
002690	CUNY Queens College	003529 L	University of Tennessee at Chattanooga
002704	College of New Rochelle		Texas
002705	College of St Rose	003537	Abilene Christian University
002710	Cooper Union	003541	Angelo State University
002737	Iona College	011161	Corpus Christi State University
002739	Ithaca College	003578	Incarinate Word College
002758	Manhattan College	003592	Midwestern State University
002765	Marist College	003630 H L	Prairie View A & M University
002788	Niagara University	003615	Southwest Texas State University
002798	Pratt Institute	003623	St Mary's University of San Antonio
002806	Rochester Institute of Technology	003625	Sul Ross State University
008786	Russell Sage College	003631	Tarleton State University
002841	SUNY College at Brockport	003639	Texas A & I University
002842	SUNY College at Buffalo	003642 H	Texas Southern University
002843	SUNY College at Cortland	003599	The University of Texas - Pan American
002844	SUNY College at Fredonia	003647	Trinity University
002845	SUNY College at Geneseo	011854	University of Central Texas
002846	SUNY College at New Paltz	013231	University of Houston - Victoria
002847	SUNY College at Oneonta	011711	University of Houston at Clear Lake City
002848	SUNY College at Oswego	010115	University of Texas at San Antonio
002849	SUNY College at Plattsburgh	029164	University of Texas at Tyler
002850	SUNY College at Potsdam	009930	University of Texas of the Permian Basin
006792	SUNY College of Technology at Utica/Rome	003665	West Texas State University
002813	Sarah Lawrence College		Vermont
002817	St Bonaventure University	003686	Goddard College
002895	Vassar College	003690	Marlboro College
002899	Wagner College	003691	Middlebury College
	North Carolina		Virginia
002906	Appalachian State University	003714 H	Hampton University
002905 H L	North Carolina A & T State University	003715	Hollins College
002950 H	North Carolina Central University	003721	James Madison University
002975	Univ of North Carolina at Charlotte	003732	Radford University
002984	University of North Carolina/Wilmington	003744	University of Richmond
002981	Western Carolina University	003764 H L	Virginia State University
	Ohio		Washington
003050	John Carroll University	003771	Central Washington University
003144	Xavier University	003775	Eastern Washington University
003145	Youngstown State University	003778	Gonzaga University
	Oklahoma	003785	Pacific Lutheran University
003154	East Central University	003794	Saint Martin's College
003161	Northeastern State University	003790	Seattle University
003181	Southwestern Oklahoma State University	003799	Walla Walla College
	Oregon	003802	Western Washington University
003212	Pacific University	003804	Whitworth College
003219	Southern Oregon State College		West Virginia
003224	University of Portland	006869	Univ of West Virginia Coll of Grad Stds
		003818	University of Charleston
		003825	West Virginia Institute of Technology

Table III-2. Master's-granting institutions in the fall 1991 survey

FICE CODE		FICE CODE	
	Wisconsin		OUTLYING AREAS
003868	Milwaukee School of Engineering		
003917	University of Wisconsin - Eau Claire		Guam
003899	University of Wisconsin - Green Bay		
003919	University of Wisconsin - La Crosse	003935	University of Guam
009630	University of Wisconsin - Oshkosh		
003921	University of Wisconsin - Platteville		
003923	University of Wisconsin - River Falls		
003924	University of Wisconsin - Stevens Point		
003915	University of Wisconsin - Stout		
003926	University of Wisconsin - Whitewater		

KEY: H = Historically Black institution  
L = Land Grant institution

## Section IV.

---

# Instructions, Survey Instruments, and Summaries

### Instructions and Survey Instruments

*Page*

Sample Form 811, List of Departments and Programs . . . . .	330
Instructions for Form 812 . . . . .	334
Form 812, Department or Program Data Sheet . . . . .	336
Crosswalk between NSF discipline codes and the NCES Classification of Instructional Programs . . . . .	338
Form 812A, Flow Chart . . . . .	340

### Summaries of Selected Departmental Responses

IV-A-1. From all departments at all graduate institutions . . . . .	341
IV-B-1. From all departments at doctorate-granting institutions . . . . .	342
IV-C-1. From all departments at master's-granting institutions . . . . .	343
IV-D-1. From all departments at all public institutions . . . . .	344
IV-D-2. From all departments at all private institutions . . . . .	345
IV-D-3. From all departments at all historically black institutions . . . . .	346
IV-D-4. From all departments at all land grant institutions . . . . .	347

NSF FORM 811  
OCTOBER 1991

## SURVEY OF GRADUATE STUDENTS AND POSTDOCTORATES IN SCIENCE AND ENGINEERING, FALL 1991

FORM APPROVED  
OMB NO. 3145-0062  
APP. EXP. 8/31/93

## NATIONAL SCIENCE FOUNDATION AND NATIONAL INSTITUTES OF HEALTH

## INSTRUCTIONS FOR SURVEY COORDINATOR

INSTITUTION: 001083-0 University of Arizona  
Graduate School

PAGE 1 OF 4

1. Please review the list of departments/programs printed on the following pages. Add any newly formed graduate science or engineering (S&E) departments or programs in the spaces provided at the end of the list and note any name changes or reorganizations where they occur. Because of special interest at NSF and NIH, please separate computer science from mathematics, separate all engineering fields by discipline (electrical, mechanical, etc.), and separate clinical psychology from all other psychology programs. If your institution offers degrees in these disciplines, please submit separate Forms 812 for each program.
2. Please cross out discontinued or non-S&E programs on the departmental/program list. Those which do not have graduate students or postdoctorates in Fall 1990, but may have them in the future, should NOT be crossed out; place a check in column (6) of the list instead of submitting a Form 812 for such departments/programs.
3. The enclosed Crosswalk shows the 3-digit NSF code and comparable NCES discipline codes for each science and engineering field. Please review the first 3 digits of the codes in column (2) of your list to verify that each department/program has been assigned to the correct discipline. If you do not agree with the code in column (2), please note the Crosswalk's discipline code that most closely corresponds to your department/program.
4. IN MEDICAL SCHOOLS ONLY, departments/programs followed by a single asterisk (\*) include the indented sections/specialties listed beneath them. These sections/specialties may be without organizational autonomy; however, because of special interest at NIH, please submit separate data for these sections/specialties. Additionally, please make sure that no duplicate data are reported for sections/specialties and their parent programs.

5. Please distribute the enclosed Forms 812 at your earliest convenience to all listed and newly formed departments/programs if data cannot be obtained from your centralized files. The Forms 812 provide definitions for all requested data items. Please follow these guidelines when completing the forms.
6. Please review the Forms 812 for completeness and reporting consistency and verify or supply the highest degree program offered by each department/program. Please check this year's data against the previous year's data shown on the departmental/program list and indicate the validity of any large year-to-year changes in the "Comments" section below or on the individual Forms 812.
7. Please DO NOT submit responses for any graduate departments in education, law, humanities, music, the arts, physical education, library sciences, and all other non-S&E fields.
8. Please return one copy of the Form 811 (this form) along with all completed Forms 812 by JANUARY 31, 1992 to:

Quantum Research Corporation  
7315 Wisconsin Avenue, Suite 631 West  
Bethesda, MD 20814

Please keep a copy of the Form 811 and the Forms 812 for your records.

9. Care should be taken to submit as complete and as accurate a report as possible in order to reduce follow-up procedures to a minimum and to make more timely statistics available. If there are any questions concerning your response, please call Dr. J. G. Huckenpahler at NSF's Division of Science Resources Studies at (202) 634-4787.

## SURVEY COORDINATOR:

NAME: Frank Antinoro  
TITLE: Office of Management Analysis & Res  
ADDRESS: University of Arizona

116 Admin Bldg  
Tucson, Arizona 85721  
TELEPHONE: (602) 621-7807

SIGNATURE OF SURVEY COORDINATOR

DATE COMPLETED

COMMENTS:

34'

341



NSF FORM 811  
OCTOBER 1991

## SURVEY OF GRADUATE STUDENTS AND POSTDOCTORATES IN SCIENCE AND ENGINEERING, FALL 1991

FORM APPROVED  
OMB NO. 3145-0062  
APP. EXP. 8/31/93

PAGE 2 OF 4

## LIST OF DEPARTMENTS AND PROGRAMS

INSTITUTION: 001083-0 University of Arizona  
Graduate School

1990 RESPONSE CODE **	DEPARTMENT CODE ***	SCIENCE OR ENGINEERING DEPARTMENTS OR PROGRAMS	DEPARTMENTAL DEGREE LEVEL	REPORTED FOR FALL 1990: FULL TIME	PART TIME	POST- DOCS.	CHECK HERE IF NO STUDENTS AND NO POSTDOCTORATES
(1)	(2)	(3)	(4)	(5)	(5)	(6)	(6)
1	10102	Aerospace & Mechanical Engineering	DOCTORATE	59	24	1	—
1	10201	Agricultural and Biosystems Engineering	DOCTORATE	25	2	0	—
1	10401	Chemical Engineering	DOCTORATE	28	0	0	—
0	10502	Civil Engineering	DOCTORATE	811	51	01	—
1	10601	Electrical & Computer Engr	DOCTORATE	260	59	0	—
1	10801	Systems & Indust Engineering	DOCTORATE	52	20	0	—
0	10901	Engineering Mechanics	DOCTORATE	91	51	01	—
1	11001	Materials Science & Engineering	DOCTORATE	56	5	7	—
1	11104	Mining Engineering	DOCTORATE	14	2	0	—
1	11105	Geological Engineering	DOCTORATE	9	7	0	—
1	11201	Nuclear Engineering	DOCTORATE	33	4	0	—
1	20101	Astronomy/Steward Observatory	DOCTORATE	38	1	12	—
1	20102	Planetary Science/Lunar & Planetary Lab	DOCTORATE	35	0	34	—
1	20201	Chemistry	DOCTORATE	138	0	34	—
1	20301	Physics	DOCTORATE	136	0	8	—
1	20302	Optical Sciences	DOCTORATE	153	25	9	—
1	30101	Atmospheric Physics and Atmospheric Sci	DOCTORATE	24	2	0	—
1	30201	Hydrology & Water Resources	DOCTORATE	98	0	0	—
1	30202	Geosciences	DOCTORATE	92	24	4	—
0	30203	Arid Lands Resource Sciences	DOCTORATE	181	01	01	—
1	30401	Renewable Natural Resources	DOCTORATE	92	48	1	—
1	40101	Computer Science	DOCTORATE	66	16	1	—
1	40102	Management Information Systems	DOCTORATE	90	29	0	—
5	40202	Mathematics	DOCTORATE	ON	ON	ON	—
3	40203	Mathematics	DOCTORATE	65	28	4	—
3	40204	Applied Mathematics	DOCTORATE	47	2	0	—
1	40301	Statistics	MASTER'S	4	0	0	—
1	50112	Animal Sciences	DOCTORATE	21	3	8	—
1	50115	Soil & Water Science	DOCTORATE	44	0	0	—
1	60601	Plant Pathology	DOCTORATE	13	0	2	—
1	60603	Plant Sciences	DOCTORATE	52	6	8	—
1	60702	Molecular & Cellular Biology	DOCTORATE	38	0	5	—
1	60802	Ecology and Evolutionary Biology	DOCTORATE	59	0	4	—
1	60901	Entomology	DOCTORATE	17	2	9	—
1	61001	Genetics	DOCTORATE	9	0	0	—
1	61201	Nutrition & Food Science (Food Sci)	MASTER'S	5	4	0	—
1	61202	Committee on Nutritional Sciences (ph.D)	DOCTORATE	49	20	2	—
1	61203	Nutrition & Food Science (Dietetics)	MASTER'S	3	7	0	—
1	61204	Nutritional Sciences (M.S.)	MASTER'S	5	4	0	—
1	61402	Pharmacology and Toxicology	DOCTORATE	81	0	19	—

(CONTINUED ON NEXT PAGE)

NSF FORM 811  
OCTOBER 1991NATIONAL SCIENCE FOUNDATION AND NATIONAL INSTITUTES OF HEALTH  
SURVEY OF GRADUATE STUDENTS AND POSTDOCTORATES IN SCIENCE AND ENGINEERING, FALL 1991  
LIST OF DEPARTMENTS AND PROGRAMSFORM APPROVED  
OMB NO. 3145-0062  
APP. EXP. 8/31/93INSTITUTION: 001083-0 University of Arizona  
Graduate School

PAGE 3 OF 4

1990

RESPONSE CODE **	DEPARTMENT CODE ***	SCIENCE OR ENGINEERING DEPARTMENTS OR PROGRAMS	DEPARTMENTAL DEGREE LEVEL	REPORTED FOR FALL 1990: FULL TIME	PART TIME	POST- DOCS.	CHECK HERE IF NO STUDENTS AND NO POSTDOCTORATES
(1)	(2)	(3)	(4)	(5)	(6)		
1	71901	Nursing	DOCTORATE	52	114	4	
1	72001	Pharmaceutical Sciences	DOCTORATE	23	0	4	
1	72002	Pharmacy Practice	DOCTORATE	9	0	1	
1	72301	Speech & Hearing Sciences	DOCTORATE	53	0	5	
1	80101	Psychology	DOCTORATE	93	0	5	
1	90101	Agricultural Economics	DOCTORATE	20	0	1	
1	90201	Anthropology	DOCTORATE	96	88	1	
1	90301	Economics	DOCTORATE	34	0	0	
1	90302	Mineral Economics	DOCTORATE	10	13	0	
1	90402	Geography and Regional Development	DOCTORATE	20	8	0	
1	90601	Linguistics	DOCTORATE	31	2	0	
1	90701	Political Science	DOCTORATE	78	0	0	
1	90802	Sociology	DOCTORATE	47	6	0	
5	91001	Oriental Studies	DOCTORATE	ON	ON	ON	
TOTAL, ALL DEPARTMENTS OR PROGRAMS:				2684	585	212	

## ADDITIONAL DEPARTMENTS OR PROGRAMS FOR FALL 1991:

Please fill in columns 3, 4, and if applicable, column 6. Using the NSF crosswalk provided, please indicate in column 2 the NSF discipline code you feel is most appropriate, or provide a brief description of the department/program's major area of concentration.

## \*\* 1990 RESPONSE CODE MEANINGS:

0 -- Non Respondent  
1 -- Matched, Data Present  
3 -- New, Data Present  
5 -- Deleted

\*\*\* THE FIRST THREE DIGITS OF THE DEPARTMENT CODE ARE A FIELD OF SCIENCE/ENGINEERING CODE; A LIST OF THESE CODES IS ENCLOSED.

NOTE: This information is solicited under the authority of the National Science Foundation Act of 1950 as amended. All information you provide will be used for statistical purposes only. Your response is entirely voluntary and your failure to provide some or all of the information will in no way adversely affect your institution.

NSF FORM 811  
OCTOBER 1991

NATIONAL SCIENCE FOUNDATION AND NATIONAL INSTITUTES OF HEALTH  
SURVEY OF GRADUATE STUDENTS AND POSTDOCTORATES IN SCIENCE AND ENGINEERING, FALL 1991

FORM APPROVED  
OMB NO. 3145-0062  
APP. EXP. 8/31/93

LIST OF SURVEY COORDINATORS

PAGE 4 OF 4

INSTITUTION: 001083-0 University of Arizona  
Graduate School

For your information, all GRADUATE STUDENT SURVEY COORDINATORS on record at your institution are listed below.

To avoid duplicate reporting of departments or programs, please be sure that joint departments or programs have been counted in only one school. In cases where you feel there may be a joint department or program between a graduate and medical school, the form 812 should be completed by the medical school and the department recorded on the medical school's form 811. Please confirm this with the other coordinators, if necessary.

Please check with the other coordinators to be sure that each eligible department in your institution has been covered by one of the coordinators listed here.

001083-5 NAME: Dr. Andreas Goldner  
TITLE: Associate Dean, Student Affairs  
ADDRESS: University of Arizona  
College of Medicine  
1501 N Campbell Ave  
Tucson, Arizona 85724  
TELEPHONE: (602) 626-6216

# INSTRUCTIONS FOR SURVEY OF GRADUATE STUDENTS AND POSTDOCTORATES IN SCIENCE AND ENGINEERING, FALL 1991

## Purpose of the survey

The survey provides a comprehensive picture of the training of future scientists and engineers in the Nation's graduate schools. Data are used by Congress and the executive branch during budget preparation, and by State government agencies and other analysts to assess future supply and demand of science and engineering (S&E) personnel.

The average time required for questionnaire completion is 2 hours. Response burden comments should be directed to Herman Fleming at (202) 357-9520.

## Students to include in survey tabulations

Count as graduate students persons enrolled for credit in a S&E master's or Ph.D. degree program in fall 1991. Report M.D., D.O., D.V.M. or D.D.S. candidates, interns and residents only if they are concurrently working for a S&E master's or Ph.D. or are enrolled in a joint medical/Ph.D. program. Individuals who already hold graduate or medical degrees and are working on another master's or Ph.D. degree are considered graduate students (Items 5-7), not postdoctorates (Item 8).

Include S&E students performing thesis or dissertation research away from the campus (for example, at Government- and contractor-owned facilities) in the United States as long as they are enrolled for credit in an advanced-degree program. Exclude students enrolled in a foreign country (at a branch or extension center), as well as non-matriculated students.

All data should be reported in terms of headcounts, not full-time equivalents (FTEs).

## Students enrolled in multiple departments/institutions

A student should be reported in only one department. Students enrolled in interdisciplinary/institutional programs should be counted only once, by their "home" department and institution.

## Incomplete data

Please write "unavailable" or "unknown" in data cells as applicable. "N/A" means "not applicable" on this form. Data cells left blank are presumed to be zeroes.

## ITEM 5: FULL-TIME STUDENTS

Use lines (1)-(6) to report all full-time students according to the source of the largest amount of their support. These students are engaged full time in their training activities in their S&E fields; these activities may embrace any appropriate combination of study, teaching and research, depending on your institution's own policy.

## Mechanisms of support lines (1)-(5)

The selection process distinguishes fellowships from traineeships. A fellowship (1) is awarded directly to, or on behalf of, a student selected in a competition, usually national in scope, to enable pursuit of post-baccalaureate training. A traineeship (2) is an educational award to a student selected by his university. An assistantship should be classified as research (3) or teaching (4), depending on assigned duties, e.g., a student devoting most of his/her time to teaching should be reported on line (4). All other full-time students, including members of the armed forces whose tuition is paid by the Department of Defense, should be reported on line (5).

## Federal sources of support columns (A)-(F)

Note that students supported by Federal loans should be reported in column (J): self-supported.

Department of Defense (DOD) (A): Sources include the Departments of the Army, Navy, or Air Force, as well as programs within the Office of the Secretary of Defense. Students receiving their main support from the Veterans Administration under the G.I. Bill should be reported under column (F), "Other Federal sources".

Department of Health and Human Services (HHS) (B) and (C): Report students receiving support from the institutes or divisions of the National Institutes of Health (NIH) under (B); support from all other components of HHS should be reflected in (C). Refer to the organizational roster under "Definitions".

U.S. Department of Agriculture (USDA) (E): Include research assistants working on projects financed out of Hatch, McIntyre-Stennis, or Smith-Lever formula funds,

competitive research grants, and institution fellowship/training grants.

Other Federal Sources (F): Report students receiving support from Federal agencies other than (A) through (E) such as the Fulbright program, the G.I. Bill, Department of Education, and Department of Energy programs.

## Non-Federal Sources of Support columns (G)-(I)

Institutional support (G): Report students supported from your institution, including those receiving tuition waivers. State and local government support is also reflected in this column. Students supported from funds originating with the Federal government, such as training grants, should be reported under the appropriate Federal agency.

Foreign sources (H): Include students supported from any non-U.S. source, such as foreign governments, industrial firms, or specialized agencies of the United Nations.

Other U.S. sources (I): Include students supported from nonprofit institutions, private industry, and all other non-Federal U.S. sources not included in columns (G) or (J).

Self-supported students (J): Report both foreign and U.S. citizen students whose main source of support is derived from loans from any source (including the Federal government) and from personal or family financial contributions. Note that these students should be included in the total, column (K).

## Women, line (7)

Report all female students by their source of main support. Please note that in each column, data on line (7) should not exceed the total on line (6).

## First-year students, lines (8) and (9)

A first-year student is one who will have completed less than a full year of graduate study as of the beginning of the fall term in 1991 in the program in which he/she is enrolled for a degree. All other students should be considered beyond their first year.

**ITEM 6: PART-TIME STUDENTS**

Report all part-time students here, regardless of their support source. These students are enrolled in advanced-degree programs and are not pursuing graduate work full-time, as defined by your institution.

**ITEM 7: CITIZENSHIP AND RACIAL/ETHNIC BACKGROUND OF U.S. CITIZENS**

Persons with U.S. citizenship should be reported in columns (A) through (F). Use the racial/ethnic designations from the Bureau of the Census listed under "Definitions". As applied in this survey, these designations do not denote scientific definitions of anthropological origins; thus, a student may be included in the group to which he/she appears to belong, identifies with, or is regarded in the community as belonging. Count each person in only one racial/ethnic group.

Non-U.S. citizens, whether permanent residents or holding temporary visas, should be reported in column (G): foreign. Applicants for U.S. citizenship should be reported as foreign. Native residents of a U.S. possession are U.S. citizens.

Total full- and part-time enrollments reported in this item should match those reported in items 5 and 6, respectively.

**ITEM 8: POSTDOCTORATES AND NONFACULTY RESEARCH STAFF WITH DOCTORATES**

**Postdoctorates (A-F):** Include individuals with S&E Ph.D.'s, M.D.'s, D.D.S.'s or D.V.M.'s (including foreign degrees that are equivalent to U.S. doctorates) who devote their primary effort to research activities or study in the department under temporary appointments carrying no academic rank. They may contribute to the academic program through seminars, lectures, or working with graduate students. Their postdoctoral activities provide additional training for them. Include persons affiliated with this department as well as those employed in associated academic research units. Exclude clinical fellows and those with appointments in residency training programs in medical and health professions, unless research training under the supervision of a senior mentor is the primary purpose of the appointment.

Use columns (A) - (D) to report postdoctorates by source of support, with the total number reported in column (E). Of this total, report the number who are foreign in column (F).

**Other non-faculty research staff with doctorates (G):** Column (G) should include all doctoral scientists and engineers who are involved principally in research activities but are considered neither postdoctoral appointees nor members of the regular faculty.

On line (2), report the number of women in each category. On line (3), report those postdoctorates and nonfaculty research staff who hold first professional medical degrees (M.D., D.D.S., D.O., D.V.M.). Please note that in each column, data on lines (2) and (3) should not exceed the total on line (1).

**DEFINITIONS:****(1) National Institutes of Health Organizational Roster**  
Item 5, column (B)

National Center for Research Resources  
Fogarty International Center  
National Cancer Institute  
National Center for Nursing Research  
National Eye Institute  
National Heart, Lung and Blood Institute  
National Institute on Aging  
National Institute on Allergy and Infectious Disease  
National Institute of Arthritis and Musculoskeletal and Skin Diseases  
National Institute of Diabetes and Digestive and Kidney Diseases  
National Institute of Child Health and Human Development  
National Institute of Dental Research  
National Institute of Environmental Health Sciences  
National Institute of General Medical Sciences  
National Institute of Neurological and Communicative Disorders and Stroke  
National Library of Medicine

**(2) Other HHS Administrative Units**  
Item 5, column (C)

Alcohol, Drug Abuse and Mental Health Administration  
National Institute of Mental Health  
Center for Disease Control  
Food and Drug Administration  
Health Resources and Services Administration  
Office of Human Development

**(3) Racial/Ethnic Categories for U.S. Citizens defined by the Bureau of the Census (Item 7)**

**Black, non-Hispanic:** Persons having origins in any of the Black racial groups (except those of Hispanic origin).

**American Indian or Alaskan native:** Persons having origins in any of the original peoples of North America.

**Asian or Pacific Islander:** Persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. These areas include China, Japan, Korea, the Philippine Islands, and Samoa.

**Hispanic:** Persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.

**White, non-Hispanic:** Persons having origins in any of the original peoples of Europe, North Africa or the Middle East, except those of Hispanic origin.

**For further information ..**

If you have any questions regarding the survey, please contact Pamela Kroes of Quantum Research Corporation at (301) 657-3070 [fax (301) 657-3862].

UPON COMPLETING THIS FORM, PLEASE RETURN IT TO YOUR SURVEY  
COORDINATOR FOR TRANSMITTAL BY JANUARY 31, 1992.

**NATIONAL SCIENCE FOUNDATION and NATIONAL INSTITUTES OF HEALTH  
Survey of Graduate Students and Postdoctorates in Science and Engineering, Fall 1991  
DEPARTMENT OR PROGRAM DATA SHEET**

Form Approved  
OMB No. 3145-0062  
Appr. Exp. 8/31/93

due date: January 31, 1992

**ITEMS 1-4. IDENTIFYING INFORMATION**

1. Institution Name \_\_\_\_\_

2. Name of S/E department or program: \_\_\_\_\_

If changed since last year, please indicate previous name and whether this represents a merger, split, or expanded program:

3. Person in department (or program) preparing this form:

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Phone: ( ) \_\_\_\_\_

4. Highest graduate degree available in this department or program (CHECK ONE): (1) Doctorate \_\_\_\_\_ (2) Master's \_\_\_\_\_ (3) No Graduate Degree Offered \_\_\_\_\_

Institution and  
department code  
(LEAVE BLANK)

**Report all data on a "headcount" basis (not fractions, decimals, FTE's, etc.). If your department does not enroll graduate students, please move to item 8.**

**ITEM 5. NUMBER OF FULL-TIME GRADUATE STUDENTS** enrolled for advanced degrees (master's and doctorate) in fall 1991. Report each student **only one time** according to the source and mechanism of the **largest amount of support** received in fall 1991.

Students receiving equal support from multiple sources or through multiple mechanisms should be reported only once. To determine the largest source of support, consider only tuition and other academic expenses.

MECHANISMS OF SUPPORT	STUDENTS RECEIVING FINANCIAL ASSISTANCE							SELF-SUPPORTED STUDENTS (including loans and family sources) (J)	TOTAL FULL-TIME GRADUATE ENROLLMENT (Sum of (A) thru (J)) (K)	
	FEDERAL SOURCES (excluding loans)				NON-FEDERAL SOURCES					
	Department of Defense (A)	National Institutes of Health (B)	Other HHS (C)	National Science Foundation (D)	Department of Agriculture (E)	Other Federal sources (F)	Institutional support (including State and local government) (G)			Foreign sources (H)
Graduate Fellowships	(1)									
Graduate Traineeships	(2)									
Graduate Research Assistantships	(3)									
Graduate Teaching Assistantships	(4)									
Other Types of Support	(5)									
<b>FULL-TIME TOTAL*</b>	(6)									
Of the students in line (6), how many in each data cell are WOMEN?	(7)									

**FIRST-YEAR STUDENTS**

Of the students on line (6), column (K), how many are FIRST-YEAR students? (Should not exceed total on line (6)).

**FIRST-YEAR WOMEN STUDENTS**

Of the first-year students on line (8), how many are WOMEN?

353

\*The total from line (6) should be inserted in item (7), line (1), column (H)



ITEM 6 NUMBER OF **PART-TIME** GRADUATE STUDENTS enrolled for advanced degrees (master's and doctorate) in fall 1991.**PART-TIME TOTAL<sup>1</sup>**

Of the students on line (1), how many are WOMEN?

(1)	
(2)	

<sup>1</sup>The total from line (1) should be inserted in item (7), line (2), column (H)

ITEM 7. RACE/ETHNICITY of FULL-TIME (line (1)) and PART-TIME (line (2)) graduate students in fall 1991.	Of the student totals in items 5 and 6, how many belong to the following RACIAL/ETHNIC categories? Be sure to count each student only once.	U.S. CITIZENS ONLY					FOREIGN: permanent residents and temporary visa holders (G)	TOTAL (Sum of (A) thru (G)) (H)	
		Black non- Hispanic (A)	Amer. Indian/ Alaskan Native (B)	Asian/ Pacific Islander (C)	Hispanic (D)	White non- Hispanic (E)			Other, unknown or declined to state (F)
FULL TIME, column (H), should equal item 5, line (6), column (K)	(1)								
PART TIME, column (H), should equal item 6, line (1)	(2)								

ITEM 8. NUMBER OF <b>POSTDOCTORATES AND NON-FACULTY RESEARCH STAFF WITH DOCTORATES</b> in fall 1991.	TOTAL	POSTDOCTORATES					OTHER NON- FACULTY RESEARCH STAFF WITH DOCTORATES (G)
		SOURCE OF SUPPORT			TOTAL for all sources (A) thru (D) (E)	Of the total in (E), how many are FOREIGN? (F)	
		Federal		Non- Federal (D)			
		Fellowships (A)	Traineeships (B)				
	(1)						
Of the total in each cell of line (1), how many are WOMEN?	(2)						
Of the total in each cell of line (1), how many hold the M.D., D.O., D.D.S., or D.V.M. degree?	(3)						

Approximately how many personhours were required to complete this form? 

Explanation of variances from prior year's data or other comments:

List of other Federal sources (agencies) from item 5, column (F), and number of full-time students supported by each:

354

355

NOTE: This information is solicited under the authority of the National Science Foundation Act of 1950, as amended. All information you provide will be used for statistical purposes only. Your response is entirely voluntary and your failure to provide some or all of the information will in no way adversely affect your institution.



This questionnaire has been printed on recycled paper.

BEST COPY AVAILABLE

# Survey of Graduate Students and Postdoctorates In Science and Engineering

## CROSSWALK BETWEEN NSF DISCIPLINE CODES AND THE NCES CLASSIFICATION OF INSTRUCTIONAL PROGRAMS

The following set of discipline codes is used to categorize science and engineering departments in the Survey of Graduate Students and Postdoctorates in Science and Engineering. Representative department names are shown under each of the discipline codes.

### ENGINEERING

- 101 AEROSPACE ENGINEERING  
14.02 AEROSPACE, AERONAUTICAL, AND ASTRONAUTICAL ENGINEERING
- 102 AGRICULTURAL ENGINEERING  
14.03 AGRICULTURAL ENGINEERING
- 103 BIOMEDICAL ENGINEERING  
14.05 BIOENGINEERING AND BIOMEDICAL ENGINEERING
- 104 CHEMICAL ENGINEERING  
03.0509 WOOD SCIENCE  
14.07 CHEMICAL ENGINEERING
- 105 CIVIL ENGINEERING  
04.02 ARCHITECTURE  
14.04 ARCHITECTURAL ENGINEERING  
14.08 CIVIL ENGINEERING  
14.14 ENVIRONMENTAL HEALTH ENGINEERING
- 106 ELECTRICAL ENGINEERING  
14.09 COMPUTER ENGINEERING  
14.10 ELECTRICAL, ELECTRONICS, AND COMMUNICATIONS ENGINEERING
- 107 ENGINEERING SCIENCE  
14.12 ENGINEERING PHYSICS  
14.13 ENGINEERING SCIENCE
- 108 INDUSTRIAL ENGINEERING/MANAGEMENT SCIENCE  
14.17 INDUSTRIAL ENGINEERING  
14.27 SYSTEMS ENGINEERING  
30.06 SYSTEMS SCIENCE
- 109 MECHANICAL ENGINEERING  
14.11 ENGINEERING MECHANICS  
14.19 MECHANICAL ENGINEERING
- 110 METALLURGICAL AND MATERIALS ENGINEERING  
14.06 CERAMIC ENGINEERING  
14.18 MATERIALS ENGINEERING  
14.20 METALLURGICAL ENGINEERING  
14.28 TEXTILE ENGINEERING  
40.0701 METALLURGY
- 111 MINING ENGINEERING  
14.15 GEOLOGICAL ENGINEERING  
14.16 GEOPHYSICAL ENGINEERING  
14.21 MINING AND MINERAL ENGINEERING
- 112 NUCLEAR ENGINEERING  
14.23 NUCLEAR ENGINEERING
- 113 PETROLEUM ENGINEERING  
14.25 PETROLEUM ENGINEERING
- 114 ENGINEERING, N.E.C.  
14.01 ENGINEERING, GENERAL  
14.22 NAVAL ARCHITECTURE AND MARINE ENGINEERING  
14.24 OCEAN ENGINEERING  
14.99 ENGINEERING, OTHER  
30.03 ENGINEERING AND OTHER DISCIPLINES

### PHYSICAL SCIENCES

- 201 ASTRONOMY  
40.02 ASTRONOMY  
40.03 ASTROPHYSICS  
40.09 PLANETARY SCIENCE
- 202 CHEMISTRY  
40.05 CHEMISTRY
- 203 PHYSICS  
40.08 PHYSICS
- 204 PHYSICAL SCIENCES, N.E.C.  
40.01 PHYSICAL SCIENCES, GENERAL  
40.0799 MISCELLANEOUS PHYSICAL SCIENCES, OTHER  
40.99 PHYSICAL SCIENCES, OTHER

### ENVIRONMENTAL SCIENCES

- 301 ATMOSPHERIC SCIENCES  
40.04 ATMOSPHERIC SCIENCES AND METEOROLOGY
- 302 GEOSCIENCES  
14.26 SURVEYING AND MAPPING SCIENCES  
40.06 GEOLOGICAL SCIENCES  
40.0703 EARTH SCIENCE
- 303 OCEANOGRAPHY  
26.0607 MARINE BIOLOGY  
40.0702 OCEANOGRAPHY
- 304 ENVIRONMENTAL SCIENCES, N.E.C.

### MATHEMATICAL SCIENCES

- 402 MATHEMATICS AND APPLIED MATHEMATICS  
06.1302 OPERATIONS RESEARCH (QUANTITATIVE METHODS)  
27.01 MATHEMATICS, GENERAL  
27.03 APPLIED MATHEMATICS  
27.04 PURE MATHEMATICS  
27.99 MATHEMATICS, OTHER  
30.08 MATHEMATICS AND COMPUTER SCIENCE
- 403 STATISTICS  
27.02 ACTUARIAL STATISTICS  
27.05 STATISTICS

### COMPUTER SCIENCE

- 401 COMPUTER SCIENCE  
06.12 MANAGEMENT INFORMATION SYSTEMS  
11 COMPUTER AND INFORMATION SCIENCES, GENERAL  
30.09 IMAGING SCIENCE

### AGRICULTURAL SCIENCES (SEE ALSO 102 AND 901)

- 501 AGRICULTURAL SCIENCES  
02.01 AGRICULTURAL SCIENCES, GENERAL  
02.02 ANIMAL SCIENCES  
02.03 FOOD SCIENCES  
02.04 PLANT SCIENCES  
02.05 SOIL SCIENCES  
02.99 AGRICULTURAL SCIENCES, OTHER  
03.01 RENEWABLE NATURAL RESOURCES, GENERAL  
03.02 CONSERVATION AND REGULATION  
03.05 FISHING AND FISHERIES  
03.06 WILDLIFE MANAGEMENT  
03.99 RENEWABLE NATURAL RESOURCES, OTHER  
31.04 WATER RESOURCES

### BIOLOGICAL SCIENCES

- 601 ANATOMY  
18.0201 CLINICAL ANATOMY  
26.0601 ANATOMY
- 602 BIOCHEMISTRY  
18.0202 CLINICAL BIOCHEMISTRY  
26.02 BIOCHEMISTRY AND BIOPHYSICS
- 603 BIOLOGY  
26.01 BIOLOGY, GENERAL  
26.0604 EMBRYOLOGY
- 604 BIOMETRY AND EPIDEMIOLOGY  
18.2202 EPIDEMIOLOGY  
26.0602 BIOMETRICS AND BIostatISTICS
- 605 BIOPHYSICS
- 606 BOTANY  
26.03 BOTANY (EXCLUDING 26.0302, BACTERIOLOGY -- SEE 611)
- 607 CELL BIOLOGY  
26.04 CELL AND MOLECULAR BIOLOGY  
26.0606 HISTOLOGY

- 608 ECOLOGY  
26.0603 ECOLOGY
- 609 ENTOMOLOGY AND PARASITOLOGY  
26.0610 PARASITOLOGY  
26.0702 ENTOMOLOGY
- 610 GENETICS  
26.0703 GENETICS, HUMAN AND ANIMAL
- 611 MICROBIOLOGY, IMMUNOLOGY, AND VIROLOGY  
18.0203 CLINICAL MICROBIOLOGY  
18.1002 ALLERGIES AND ENDOLOGY  
26.0302 BACTERIOLOGY  
26.05 MICROBIOLOGY
- 612 NUTRITION  
19.05 FOOD SCIENCES AND HUMAN NUTRITION  
20.0108 FOOD AND NUTRITION  
26.0609 NUTRITIONAL SCIENCES
- 613 PATHOLOGY  
18.0204 CLINICAL PATHOLOGY  
18.1018 PATHOLOGY  
26.0704 PATHOLOGY, HUMAN AND ANIMAL
- 614 PHARMACOLOGY  
18.0206 CLINICAL TOXICOLOGY  
26.0612 TOXICOLOGY  
26.0705 PHARMACOLOGY, HUMAN AND ANIMAL  
42.14 PSYCHOPHARMACOLOGY
- 615 PHYSIOLOGY  
18.0205 PHYSIOLOGY  
26.0708 PHYSIOLOGY, HUMAN AND ANIMAL
- 616 ZOOLOGY  
26.0701 ZOOLOGY  
26.0799 ZOOLOGY, HUMAN AND ANIMAL
- 617 BIOSCIENCES, N.E.C.  
26.0699 MISCELLANEOUS SPECIALIZED AREAS, LIFE SCIENCES, OTHER  
26.99 LIFE SCIENCES, OTHER

#### PSYCHOLOGY

- 801 PSYCHOLOGY, COMBINED  
802 PSYCHOLOGY, EXCEPT CLINICAL  
13.08 SCHOOL PSYCHOLOGY  
17.0801 ART THERAPY  
803 CLINICAL PSYCHOLOGY

#### SOCIAL SCIENCES

- 901 AGRICULTURAL ECONOMICS  
01.0102 AGRICULTURAL BUSINESS AND MANAGEMENT  
01.0103 AGRICULTURAL ECONOMICS
- 902 ANTHROPOLOGY (CULTURAL AND SOCIAL)  
45.02 ANTHROPOLOGY  
45.03 ARCHAEOLOGY
- 903 ECONOMICS  
06.05 BUSINESS ECONOMICS  
45.06 ECONOMICS
- 904 GEOGRAPHY  
45.07 GEOGRAPHY
- 905 HISTORY AND PHILOSOPHY OF SCIENCE
- 906 LINGUISTICS  
23.06 LINGUISTICS  
42.12 PSYCHOLINGUISTICS
- 907 POLITICAL SCIENCE  
44.01 PUBLIC AFFAIRS, GENERAL  
44.03 INTERNATIONAL PUBLIC SERVICE  
44.04 PUBLIC ADMINISTRATION  
44.05 PUBLIC POLICY STUDIES  
44.99 PUBLIC AFFAIRS, OTHER  
45.09 INTERNATIONAL RELATIONS  
45.10 POLITICAL SCIENCE AND GOVERNMENT
- 908 SOCIOLOGY  
45.05 DEMOGRAPHY  
45.11 SOCIOLOGY
- 909 SOCIOLOGY/ANTHROPOLOGY
- 910 SOCIAL SCIENCES, N.E.C.  
04.03 CITY, COMMUNITY AND REGIONAL PLANNING  
05 AREA AND ETHNIC STUDIES  
43.01 CRIMINAL JUSTICE  
44.02 COMMUNITY SERVICES  
45.01 SOCIAL SCIENCES, GENERAL  
45.12 URBAN STUDIES  
45.99 SOCIAL SCIENCES, OTHER

#### HEALTH FIELDS (SEE ALSO 103)

- 701 ANESTHESIOLOGY  
18.1003 ANESTHESIOLOGY
- 702 CARDIOLOGY
- 703 ONCOLOGY/CANCER RESEARCH
- 704 ENDOCRINOLOGY  
26.0605 ENDOCRINOLOGY
- 705 GASTROENTEROLOGY
- 706 HEMATOLOGY  
18.08 HEMATOLOGY
- 707 NEUROLOGY  
18.1024 NEUROLOGY  
26.0608 NEUROSCIENCES
- 708 OBSTETRICS AND GYNECOLOGY  
18.1013 OBSTETRICS AND GYNECOLOGY
- 709 OPHTHALMOLOGY  
18.1014 OPHTHALMOLOGY  
18.12 OPTOMETRY
- 710 OTORHINOLARYNGOLOGY  
18.1017 OTORHINOLARYNGOLOGY/OTOLARYNGOLOGY
- 711 PEDIATRICS  
18.1019 PEDIATRICS  
20.0102 CHILD DEVELOPMENT, CARE, AND GUIDANCE
- 712 PREVENTIVE MEDICINE AND COMMUNITY HEALTH  
18.1007 FAMILY PRACTICE  
18.1022 PREVENTIVE MEDICINE  
18.22 PUBLIC HEALTH
- 713 PSYCHIATRY  
18.1023 PSYCHIATRY  
18.1106 PSYCHIATRY/MENTAL HEALTH
- 714 PULMONARY DISEASE
- 715 RADIOLOGY  
18.1012 NUCLEAR MEDICINE  
18.1025 RADIOLOGY  
26.0611 RADIOBIOLOGY
- 716 SURGERY  
18.1044 COLON AND RECTAL SURGERY  
18.1011 NEUROLOGICAL SURGERY  
18.1016 ORTHOPEDIC  
18.1021 PLASTIC SURGERY  
18.1026 SURGERY  
18.1027 THORACIC SURGERY
- 717 CLINICAL MEDICINE, N.E.C.  
18.0299 BASIC CLINICAL HEALTH SCIENCES, OTHER  
18.1001 MEDICINE, GENERAL  
18.1005 DERMATOLOGY  
18.1008 GERIATRICS  
18.1010 INTERNAL MEDICINE  
18.1020 PHYSICAL MEDICINE AND REHABILITATION  
18.1028 UROLOGY  
18.1099 MEDICINE, OTHER  
18.13 OSTEOPATHIC MEDICINE  
18.15 PODIATRY  
30.01 BIOLOGICAL AND PHYSICAL SCIENCES
- 718 DENTAL SCIENCES  
18.04 DENTISTRY  
18.1015 ORTHODONTIC SURGERY
- 719 NURSING  
18.11 NURSING (EXCLUDING 18.1106, PSYCHIATRY/MENTAL HEALTH -- SEE 713)
- 720 PHARMACEUTICAL SCIENCES  
18.14 PHARMACY
- 721 VETERINARY SCIENCES  
18.24 VETERINARY MEDICINE
- 722 HEALTH RELATED, N.E.C.  
17.0807 OCCUPATIONAL THERAPY  
17.0813 PHYSICAL THERAPY  
17.0899 REHABILITATION SERVICES, OTHER  
17.99 ALLIED HEALTH  
18.07 HEALTH SCIENCES ADMINISTRATION  
18.09 MEDICAL LABORATORY  
18.99 HEALTH SCIENCES, OTHER
- 723 SPEECH PATHOLOGY AND AUDIOLOGY  
18.01 AUDIOLOGY AND SPEECH PATHOLOGY

REV. 8-91

**FLOW CHART**  
**NSF SURVEY OF GRADUATE SCIENCE AND ENGINEERING STUDENTS AND POSTDOCTORATES**  
 Institutions that automate NSF survey data, or plan to--or even engage in manual data processing--may be assisted in  
 tabulating enrollment data (Items 5-7 on form 812) by this chart.

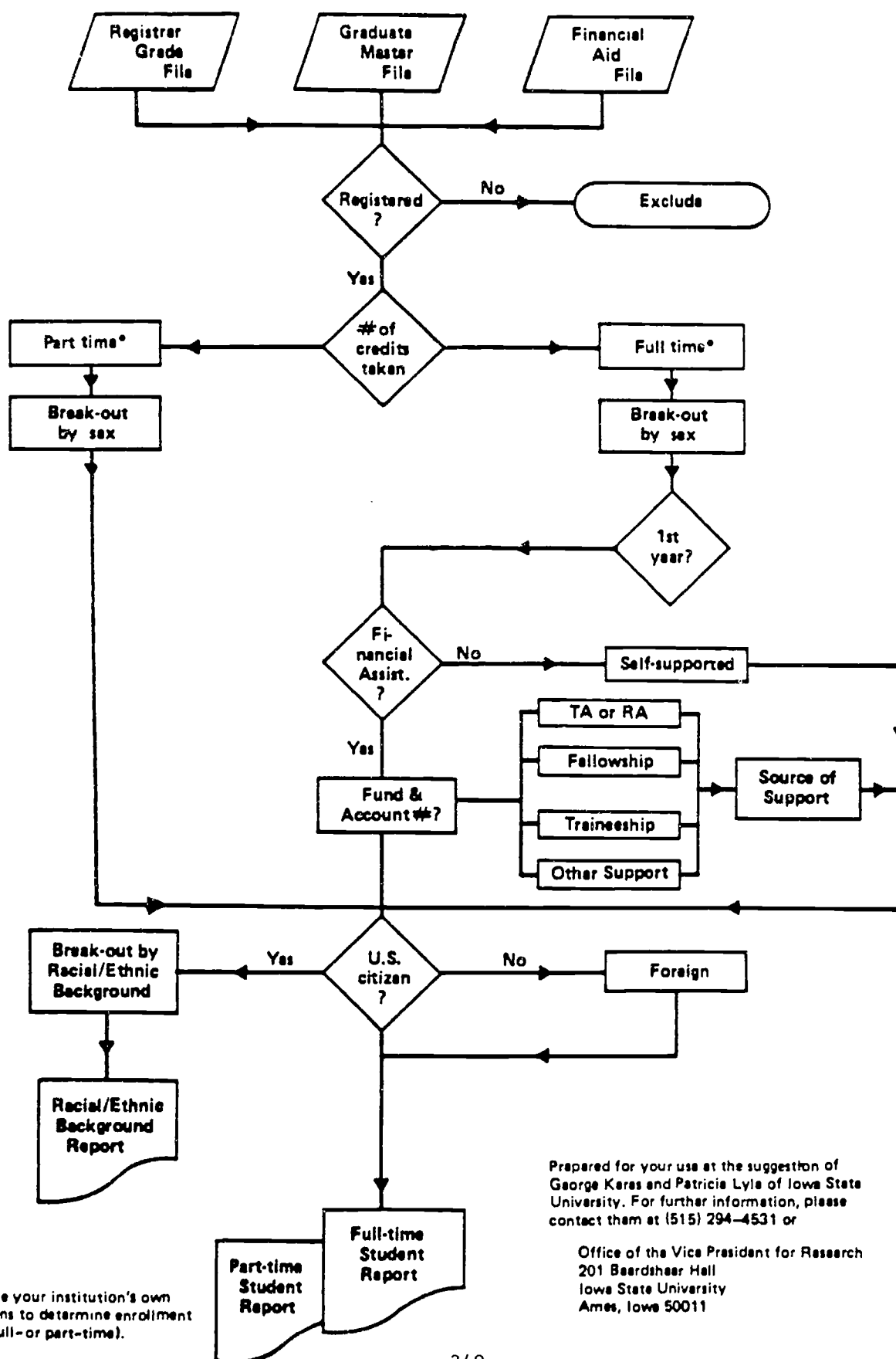


Table IV-A-1. Summary of responses from all departments  
at all graduate institutions: fall 1990

Number of departments: 10,483

5. FULL-TIME GRADUATE S/E STUDENTS		Students receiving financial assistance								Self support (includ. loans & family sources) (J)	Total for all sources (sum of columns A - I) (K)	
		Federal sources (excluding loans)					Non-Federal sources					
		HHS			NSF	Dept. of Agr. (E)	Other Federal sources (F)	Inst. support (G)	Foreign sources (H)			Other U.S. sources (I)
		DOD (A)	NIH (B)	Other HHS (C)								
Graduate fellowships (1)		583	883	193	2,101	110	2,515	13,332	2,230	3,695	25,642	
Graduate traineeships (2)		124	4,376	3,227	54	57	1,528	5,022	238	578	15,204	
Graduate research assistants (3)		5,312	9,403	1,034	9,697	2,439	10,583	30,363	728	11,479	81,038	
Graduate teaching assistants (4)			97	24	86	44	367	63,908		532	65,058	
Other types of support (5)		2,797	271	128	78	83	1,669	10,830	3,396	3,596	86,046	
FULL-TIME TOTAL (6)		8,816	15,030	4,606	12,016	2,733	16,662	123,455	6,592	19,880	295,836	
Full-time women (7)		1,341	6,418	3,461	2,689	911	4,833	43,967	1,228	5,485	107,416	
Full-time first-year total (8)											88,160	
Full-time first-year women (9)											35,332	
6. PART-TIME GRADUATE S/E STUDENTS		Total (1)	163,107									
		Women (2)	72,035									
7. RACIAL/ETHNIC BACKGROUND OF GRADUATE S/E STUDENTS		U.S. citizens only						Foreign (G)	Total (sum of columns A - G) (H)			
		Black non- Hispanic (A)	American Indian/ Alaskan (B)	Asian/ Pacific Islander (C)	Hispanic (D)	White non- Hispanic (E)	Other or unknown (F)					
Full-time (1)		8,249	768	12,106	7,833	168,373	7,697	90,810	295,836			
Part-time (2)		7,224	502	7,089	4,736	117,624	9,978	15,954	163,107			
8. S/E POSTDOCTORATES AND NONFACULTY DOCTORAL RESEARCH STAFF		Postdoctorates					Total for all sources (A - D) (E)	Foreign postdoc- torates (F)	Other non-fac. doctoral research staff (G)			
		Source of support			Non- Federal (D)							
		Fellow- ships (A)	Trainee- ships (B)	Research grants (C)								
Total (1)		2,907	2,726	15,329	9,520	30,482	14,710	5,279				
Women (2)		944	960	3,748	2,603	8,255	3,336	1,397				
With MD, DDS, or DVM degrees (3)		861	1,195	1,495	2,783	6,334	2,791	447				

Source: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table IV-B-1. Summary of responses from all departments  
at doctorate-granting institutions: fall 1990

Number of departments: 8,967

5. FULL-TIME GRADUATE S/E STUDENTS		Students receiving financial assistance								Self support (includ. loans & family sources) (J)	Total for all sources (sum of columns A - I) (K)	
		Federal sources (excluding loans)					Non-Federal sources					
		HHS			NSF	Dept. of Agr. (E)	Other Federal sources (F)	Inst. support (G)	Foreign sources (H)			Other U.S. sources (I)
		DOD (A)	NIH (B)	Other HHS (C)								
Graduate fellowships (1)		577	881	191	2,093	107	2,398	12,958	2,197	3,631	25,033	
Graduate traineeships (2)		120	4,359	3,020	54	57	1,480	4,900	237	559	14,786	
Graduate research assistants (3)		5,252	9,334	1,028	9,641	2,373	10,356	28,963	721	11,419	79,087	
Graduate teaching assistants (4)			94	24	85	44	311	61,546		505	62,609	
Other types of support (5)		2,753	271	101	76	80	1,356	9,982	3,297	3,454	72,377	
FULL-TIME TOTAL (6)		8,702	14,939	4,364	11,949	2,661	15,901	118,349	6,452	19,568	275,262	
Full-time women (7)		1,324	6,366	3,244	2,665	881	4,513	41,531	1,188	5,367	97,133	
Full-time first-year total (8)											80,479	
Full-time first-year women (9)											31,245	
6. PART-TIME GRADUATE S/E STUDENTS		Total (1)		123,143								
		Women (2)		52,339								
7. RACIAL/ETHNIC BACKGROUND OF GRADUATE S/E STUDENTS		U.S. citizens only						Foreign (G)	Total (sum of columns A - G) (H)			
		Black non- Hispanic (A)	American Indian/ Alaskan (B)	Asian/ Pacific Islander (C)	Hispanic (D)	White non- Hispanic (E)	Other or unknown (F)					
Full-time (1)		6,835	706	11,279	7,247	155,886	6,146	87,163	275,262			
Part-time (2)		4,730	382	5,258	3,528	89,118	6,757	13,370	123,143			
8. S/E POSTDOCTORATES AND NONFACULTY DOCTORAL RESEARCH STAFF		Postdoctorates					Total for all sources (A - D) (E)	Foreign postdoc- torates (F)	Other non-fac. doctoral research staff (G)			
		Source of support										
		Fellow- ships (A)	Trainee- ships (B)	Research grants (C)	Non- Federal (D)							
Total (1)		2,906	2,726	15,297	9,503	30,432	14,678		5,254			
Women (2)		944	960	3,744	2,602	8,250	3,333		1,393			
With MD, DDS, or DVM degrees (3)		861	1,195	1,495	2,783	6,334	2,791		447			

Source: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

346



Table IV-C-1. Summary of responses from all departments  
at master's-granting institutions: fall 1990

Number of departments: 1,516

5. FULL-TIME GRADUATE S/E STUDENTS	Students receiving financial assistance									Self support (includ. loans & family sources) (J)	Total for all sources (sum of columns A - I) (K)
	Federal sources (excluding loans)						Non-Federal sources				
	HHS			NSF (D)	Dept. of Agr. (E)	Other Federal sources (F)	Inst. support (G)	Foreign sources (H)	Other U.S. sources (I)		
	DOD (A)	NIH (B)	Other HHS (C)								
Graduate fellowships (1)	6	2	2	8	3	117	374	33	64		609
Graduate traineeships (2)	4	17	207	0	0	48	122	1	19		418
Graduate research assistants (3)	60	69	6	56	66	227	1,400	7	60		1,951
Graduate teaching assistants (4)		3	0	1	0	56	2,362		27		2,449
Other types of support (5)	44	0	27	2	3	313	848	99	142	13,669	15,147
FULL-TIME TOTAL (6)	114	91	242	67	72	761	5,106	140	312	13,669	20,574
Full-time women (7)	17	52	217	24	30	320	2,436	40	118	7,029	10,283
Full-time first-year total (8)											7,681
Full-time first-year women (9)											4,087
=====											
6. PART-TIME GRADUATE S/E STUDENTS	Total (1)	39,964									
	Women (2)	19,696									
=====											
7. RACIAL/ETHNIC BACKGROUND OF GRADUATE S/E STUDENTS	U.S. citizens only							Foreign (G)	Total (sum of columns A - G) (H)		
	Black non- Hispanic (A)	American Indian/ Alaskan (B)	Asian/ Pacific Islander (C)	Hispanic (D)	White non- Hispanic (E)	Other or unknown (F)					
Full-time (1)	1,414	62	827	586	12,487	1,551	3,647	20,574			
Part-time (2)	2,494	120	1,831	1,208	28,506	3,221	2,584	39,964			
=====											
8. S/E POSTDOCTORATES AND NONFACULTY DOCTORAL RESEARCH STAFF	Postdoctorates						Total for all sources (A - D) (E)	Foreign postdoc- torates (F)	Other non-fac. doctoral research staff (G)		
	Source of support				Non- Federal (D)						
	Fellow- ships (A)	Trainee- ships (B)	Research grants (C)								
Total (1)	1	0	32	17	50	32	25				
Women (2)	0	0	4	1	5	3	4				
With MD, DDS, or DVM degrees (3)	0	0	0	0	0	0	0				

Source: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table IV-D-1. Summary of responses from all departments  
at all public institutions: fall 1990

Number of departments: 7,293

5. FULL-TIME GRADUATE S/E STUDENTS		Students receiving financial assistance									Self support (includ. loans & family sources) (J)	Total for all sources (sum of columns A - I) (K)	
		Federal sources (excluding loans)						Non-Federal sources					
		HHS			NSF (D)	Dept. of Agr. (E)	Other Federal sources (F)	Inst. support (G)	Foreign sources (H)	Other U.S. sources (I)			
		DOD (A)	NIH (B)	Other HHS (C)									
Graduate fellowships (1)		273	411	137	941	103	1,668	7,541	1,146	2,115		14,335	
Graduate traineeships (2)		74	2,176	2,642	31	45	1,091	1,928	142	316		8,445	
Graduate research assistants (3)		3,396	6,542	779	6,740	2,353	8,127	25,462	568	8,547		62,514	
Graduate teaching assistants (4)			73	20	66	44	290	51,552		408		52,453	
Other types of support (5)		2,396	194	79	74	82	1,440	6,763	2,362	2,336	58,678	74,404	
FULL-TIME TOTAL (6)		6,139	9,396	3,657	7,852	2,627	12,616	93,246	4,218	13,722	58,678	212,151	
Full-time women (7)		925	4,019	2,823	1,752	864	3,654	32,542	797	3,827	24,351	75,554	
Full-time first-year total (8)												63,654	
Full-time first-year women (9)												25,118	
6. PART-TIME GRADUATE S/E STUDENTS		Total (1)		109,321									
		Women (2)		48,534									
7. RACIAL/ETHNIC BACKGROUND OF GRADUATE S/E STUDENTS		U.S. citizens only							Foreign (G)	Total (sum of columns A - G) (H)			
		Black non- Hispanic (A)	American Indian/ Alaskan (B)	Asian/ Pacific Islander (C)	Hispanic (D)	White non- Hispanic (E)	Other or unknown (F)						
	Full-time (1)	5,840	591	8,257	5,867	121,258	5,143	65,195	212,151				
	Part-time (2)	4,819	376	4,487	3,471	79,524	5,008	11,636	109,321				
8. S/E POSTDOCTORATES AND NONFACULTY DOCTORAL RESEARCH STAFF		Postdoctorates						Total for all sources (A - D) (E)	Foreign postdoc- torates (F)	Other non-fac. doctoral research staff (G)			
		Source of support				Non- Federal (D)							
		Fellow- ships (A)	Trainee- ships (B)	Research grants (C)									
	Total (1)	1,569	1,394	9,489	5,119	17,571	8,473		3,253				
	Women (2)	503	503	2,354	1,326	4,686	1,819		828				
	With MD, DDS, or DVM degrees (3)	470	562	676	1,084	2,792	1,127		220				

Source: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

382

Table IV-D-2. Summary of responses from all departments  
at all private institutions: fall 1990

Number of departments: 3,190

5. FULL-TIME GRADUATE S/E STUDENTS		Students receiving financial assistance									Self support (includ. loans & family sources) (J)	Total for all sources (sum of columns A - I) (K)
		Federal sources (excluding loans)						Non-Federal sources				
		HHS			NSF (D)	Dept. of Agr. (E)	Other Federal sources (F)	Inst. support (G)	Foreign sources (H)	Other U.S. sources (I)		
		DOO (A)	NIH (B)	Other HHS (C)								
Graduate fellowships (1)		310	472	56	1,160	7	847	5,791	1,084	1,580		11,307
Graduate traineeships (2)		50	2,200	585	23	12	437	3,094	96	262		6,759
Graduate research assistants (3)		1,916	2,861	255	2,957	86	2,456	4,901	160	2,932		18,524
Graduate teaching assistants (4)			24	4	20	0	77	12,356		124		12,605
Other types of support (5)		401	77	49	4	1	229	4,067	1,034	1,260	27,368	34,490
FULL-TIME TOTAL (6)		2,677	5,634	949	4,164	106	4,046	30,209	2,374	6,158	27,368	63,685
Full-time women (7)		416	2,399	638	937	47	1,179	11,425	431	1,658	12,732	31,862
Full-time first-year total (8)												24,506
Full-time first-year women (9)												10,214

6. PART-TIME GRADUATE S/E STUDENTS		Total (1)	53,786
		Women (2)	23,501

7. RACIAL/ETHNIC BACKGROUND OF GRADUATE S/E STUDENTS		U.S. citizens only						Total (sum of columns A - G) (H)	
		Black non- Hispanic (A)	American Indian/ Alaskan (B)	Asian/ Pacific Islander (C)	Hispanic (D)	White non- Hispanic (E)	Other or unknown (F)		
Full-time (1)		2,409	177	3,849	1,966	47,115	2,554	25,615	83,685
Part-time (2)		2,405	126	2,602	1,265	38,100	4,970	4,318	53,786

8. S/E POSTDOCTORATES AND NONFACULTY DOCTORAL RESEARCH STAFF		Postdoctorates					Other non-fac. doctoral research staff (G)	
		Source of support				Total for all sources (A - D) (E)		Foreign postdoc- torates (F)
		Fellow- ships (A)	Trainee- ships (B)	Research grants (C)	Non- Federal (D)			
Total (1)		1,338	1,332	5,840	4,401	12,911	6,237	2,026
Women (2)		441	457	1,394	1,277	3,569	1,517	569
With MD, DDS, or DVM degrees (3)		391	633	819	1,699	3,542	1,664	227

Source: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table IV-D-3. Summary of responses from all departments  
at all historically black institutions: fall 1990

Number of departments: 174

5. FULL-TIME GRADUATE S/E STUDENTS	Students receiving financial assistance									Self support (includ. loans & family sources) (J)	Total for all sources (sum of columns A - I) (K)
	Federal sources (excluding loans)					Non-Federal sources					
	DOD (A)	HHS		NSF (D)	Dept. of Agr. (E)	Other Federal sources (F)	Inst. support (G)	Foreign sources (H)	Other U.S. sources (I)		
		NIH (B)	Other HHS (C)								
Graduate fellowships (1)	3	20	4	8	0	89	116	3	34		277
Graduate traineeships (2)	15	81	18	0	0	19	1	0	23		157
Graduate research assistants (3)	52	73	4	30	54	92	136	5	15		461
Graduate teaching assistants (4)		1	0	0	0	45	268		14		328
Other types of support (5)	1	5	0	1	2	31	131	7	29	709	916
FULL-TIME TOTAL (6)	71	180	26	39	56	276	652	15	115	709	2,139
Full-time women (7)	23	91	20	13	21	94	291	4	46	302	905
Full-time first-year total (8)											688
Full-time first-year women (9)											332
=====											
6. PART-TIME GRADUATE S/E STUDENTS	Total (1)	1,489									
	Women (2)	699									
=====											
7. RACIAL/ETHNIC BACKGROUND OF GRADUATE S/E STUDENTS	U.S. citizens only						Foreign (G)	Total (sum of columns A - G) (H)			
	Black non- Hispanic (A)	American Indian/ Alaskan (B)	Asian/ Pacific Islander (C)	Hispanic (D)	White non- Hispanic (E)	Other or unknown (F)					
Full-time (1)	1,143	0	118	22	176	54	626	2,139			
Part-time (2)	818	3	66	3	258	38	303	1,489			
=====											
8. S/E POSTDOCTORATES AND NONFACULTY DOCTORAL RESEARCH STAFF	Postdoctorates					Total for all sources (A - D) (E)	Foreign postdoc- torates (F)	Other non-fac. doctoral research staff (G)			
	Source of support										
	Federal										
	Fellow- ships (A)	Trainee- ships (B)	Research grants (C)	Non- Federal (D)							
Total (1)	3	0	49	8	60	34		16			
Women (2)	1	0	18	3	22	10		3			
With MD, DDS, or DVM degrees (3)	0	0	4	2	6	4		0			

Source: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table IV-D-4. Summary of responses from all departments  
at all land grant institutions: fall 1990

Number of departments: 3,014

5. FULL-TIME GRADUATE S/E STUDENTS	Students receiving financial assistance									Self support (includ. loans & family sources) (J)	Total for all sources (sum of columns A - I) (K)			
	Federal sources (excluding loans)						Non-Federal sources							
	HHS			NSF (D)	Dept. of Agr. (E)	Other Federal sources (F)	Inst. support (G)	Foreign sources (H)	Other U.S. sources (I)					
	DOD (A)	NIH (B)	Other HHS (C)											
	Graduate fellowships (1)	283	207	80	958	100	1,094	4,223	983			1,505	9,433	
	Graduate traineeships (2)	69	1,328	1,039	25	51	499	1,021	77			187	4,296	
	Graduate research assistants (3)	2,674	3,389	494	4,912	2,115	5,763	13,549	473			6,038	39,407	
	Graduate teaching assistants (4)		18	6	41	37	175	27,909				180	28,366	
	Other types of support (5)	434	78	16	44	73	455	2,947	1,323			1,391	23,396	30,157
	FULL-TIME TOTAL (6)	3,460	5,020	1,635	5,980	2,376	7,986	49,649	2,856			9,301	23,396	111,659
Full-time women (7)	528	2,082	1,208	1,300	808	1,979	16,311	558	2,433	8,734	35,941			
Full-time first-year total (8)											31,386			
Full-time first-year women (9)											11,101			
=====														
6. PART-TIME GRADUATE S/E STUDENTS	Total (1)	30,294												
	Women (2)	12,033												
=====														
7. RACIAL/ETHNIC BACKGROUND OF GRADUATE S/E STUDENTS	U.S. citizens only							Total (sum of columns A - G) (H)						
	Black non- Hispanic (A)	American Indian/ Alaskan (B)	Asian/ Pacific Islander (C)	Hispanic (D)	White non- Hispanic (E)	Other or unknown (F)	Foreign (G)							
	Full-time (1)	2,556	294	4,717	3,610	61,432	1,778		37,272	111,659				
	Part-time (2)	1,116	99	961	1,020	21,835	832	4,431	30,294					
=====														
8. S/E POSTDOCTORATES AND NONFACULTY DOCTORAL RESEARCH STAFF	Postdoctorates						Other non-fac. doctoral research staff (G)							
	Source of support				Total for all sources (A - D) (E)	Foreign postdoc- torates (F)								
	Federal													
	Fellow- ships (A)	Trainee- ships (B)	Research grants (C)	Non- Federal (D)										
	Total (1)	927	674	5,664	3,196	10,461		4,894	2,560					
	Women (2)	278	247	1,378	849	2,752		1,066	628					
With MD, DDS, or DVM degrees (3)	238	189	272	573	1,272	509	147							

Source: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

## SUPPLEMENTARY DATA RELEASES AVAILABLE

In response to the particular interests expressed by many users of data from the Survey of Graduate Students and Postdoctorates in Science and Engineering, a number of pamphlets have been prepared that concentrate on various aspects of the survey results. If you would like to receive any of these supplementary data release pamphlets, please check the appropriate boxes below and return this page with your name and address to the NSF survey monitor:

*J. G. Huckenpöhler, Ph.D.  
Program Analyst  
Division of Science Resources Studies  
Room L-609  
National Science Foundation  
1800 G Street, N.W.  
Washington, DC 20550*

Name: \_\_\_\_\_

Organization: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State, ZIP: \_\_\_\_\_

- |                          |   |
|--------------------------|---|
| <input type="checkbox"/> | 1. Trends in graduate S&E enrollment, 1975-91   |
| <input type="checkbox"/> | 2. Enrollment status (full-time or part-time)   |
| <input type="checkbox"/> | 3. Source of major support  |
| <input type="checkbox"/> | 4. Mechanism of support   |
| <input type="checkbox"/> | 5. Sex  |
| <input type="checkbox"/> | 6. Level of enrollment  |
| <input type="checkbox"/> | 7. Citizenship  |
| <input type="checkbox"/> | 8. Racial/ethnic background   |
| <input type="checkbox"/> | 9. Institutional highest degree granted   |
| <input type="checkbox"/> | 10. Type of institutional control   |
| <input type="checkbox"/> | 11. Geographic distribution   |
| <input type="checkbox"/> | 12. Individual institution listings   |
| <input type="checkbox"/> | 13. Postdoctorates and other nonfaculty research personnel (doctorate-granting institutions only) |
| <input type="checkbox"/> | 14. Historically black colleges and universities  |
| <input type="checkbox"/> | 15. Land grant institutions   |
| <input type="checkbox"/> | 16. Engineering fields  |



NATIONAL SCIENCE FOUNDATION  
WASHINGTON, D.C. 20550

OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE \$300

RETURN THIS COVER SHEET TO ROOM 233A IF YOU DO  
NOT WISH TO RECEIVE THIS MATERIAL ☐ , OR IF  
CHANGE OF ADDRESS IS NEEDED ☐ , INDICATE  
CHANGE, INCLUDING ZIP CODE ON THE LABEL (DO NOT  
REMOVE LABEL).

SPECIAL FOURTH-CLASS RATE  
POSTAGE & FEES PAID  
National Science Foundation  
Permit No. G-69

BEST COPY AVAILABLE

NSF 93-309

367